

19980824.qrp v01_n193.qrs.980824

Date: Mon, 24 Aug 1998 19:03:10 EDT
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 1193

QRP-L Digest 1193

Topics covered in this issue include:

- 1) [18237] SOLAR 8-23: Some storming
by Paul Harden <pharden@aoc.nrao.edu>
- 2) [18238] Re: Somebody Software (was: re: CW Binaural Spatial Separation)
by applitech@mcg.net (Claton Cadmus)
- 3) [18239] replies
by Bill Boose <wboose@ptd.net>
- 4) [18240] Apples and Oranges--September QST
by Wes Hayward <w7zoi@mail.teleport.com>
- 5) [18241] Re: NERDS Contest - Antenna ideas?
by "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
- 6) [18242] CQC Contest
by "Jim Larsen (AL7FS)" <larsennnc@alaska.net>
- 7) [18243] Contest!
by tom whalen <whalen@swcp.com>
- 8) [18244] Re: choke balun heat shrinking experience
by "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
- 9) [18245] Looking for QRP contacts from JA this Monday PM
by "Eric Swartz (WA6HHQ), EleCraft - JAPAN" <erics@elecraft.com>
- 10) [18246] RE: S&S "M1" marches on ...
by cy r currier <crc3@telplus.net>
- 11) [18247] The Alcatraz trip pictures (Warning not totally QRP...yet)
by Dave Willey <dave@cds1.net>
- 12) [18248] Re: bandpass filters
by Bob Liesenfeld <wb0poq@visi.com>
- 13) [18249] multiband loop, status
by bob evinger <revinger@marshallonline.com>
- 14) [18250] Palomar Noise Bridge for Trade
by Wes Spence <ac5k@ih2000.net>
- 15) [18251] Re: KUDOS to Small Wonder Labs and thanks to group
by Rick Mintz <Rmintz@FRONTIERNET.NET>
- 16) [18252] n2brt back on HF / SLV
by "Adam B. Kanis" <adam-kanis@uiowa.edu>
- 17) [18253] Aurora Alert 23-26 August
by Paul Harden <pharden@aoc.nrao.edu>
- 18) [18254] paying membership
by "Duane" <duane@flinet.com>
- 19) [18255] FS: FT-790R/ MK II

- by "W. Keith Hibbert" <wb2vuo@frontiernet.net>
- 20) [18256] CQC QSO Party - Results
by Kelly Ellison {WB0WQS} <kelman@dialnet.net>
- 21) [18257] Re: bandpass filters
by David Fouchey <dafouche@jax-inter.net>
- 22) [18258] CQC Sprint -- WE6W Summary
by we6w@juno.com (Ed Loranger)
- 23) [18259] CQC Test
by "Wilford D. Lindsey" <70511.3041@compuserve.com>
- 24) [18260] QRPP Subscription Information
by ki6ds@dpol.k12.ca.us (Hendricks, Doug)
- 25) [18261] WANTED QF-1 INFO?
by ARDUJENSKI@aol.com
- 26) [18262] Discriminators
by Tracy@bytemark.com (Tracy)
- 27) [18263] Receiver noise floors and audio voltmeters (long)
by mike czuhajewski <wa8mcq@erols.com>
- 28) [18264] CQC QSO Party Multi-op: AB7TT and Murphy
by Joe Gervais <vole@primenet.com>
- 29) [18265] Re: Bench RF signal source...MFJ - 249?
by n2tpa@juno.com (Bill d Lazure)
- 30) [18266] Re: Receiver noise floors and audio voltmeters (long)
by Paul Harden <pharden@aoc.nrao.edu>
- 31) [18267] My CQC Contest Adventure (sorta long)
by "Bill Todd" <bill@willapabay.org>
- 32) [18268] Roy Gregson es EMTECH
by TMcfadden@aol.com
- 33) [18269] Apology to Jeff Herman
by Rick Mintz <Rmintz@frontiernet.net>
- 34) [18270] cqc K0FRP
by alan dawkins <alk0frp@earthlink.net>
- 35) [18271] Re: Receiver noise floors and audio voltmeters (long)
by David Fouchey <dafouche@jax-inter.net>
- 36) [18272] Update on JE1ZDX times + freq's to US
by "Eric Swartz (WA6HHQ), EleCraft - JAPAN" <erics@elecraft.com>
- 37) [18273] MF thru HF general coverage receiver
by John Mckee <JMckee@RFMD.com>
- 38) [18274] QRP Bob Meets Sashimi...
by "Eric Swartz (WA6HHQ), EleCraft - JAPAN" <erics@elecraft.com>
- 39) [18275] PVC Dimensions
by "Craig LaBarge" <labarge@hotmail.com>
- 40) [18276] Re: replies
by "George T. Baker" <w5yr@swbell.net>
- 41) [18277] Re: PVC Dimensions
by "Radman" <radman@best.com>
- 42) [18278] Re: MF thru HF general coverage receiver
by "Vincent Ferme" <vferme@sprint.ca>
- 43) [18279] 15M DELTA/PARASITIC

- by ARDUJENSKI@aol.com
- 44) [18280] K5FO email address
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 45) [18281] Wyoming QRP - 29 Aug 98
by John Evans - N0HJ <jaevans@codenet.net>
- 46) [18282] Re: Wyoming QRP - Oops !!
by John Evans - N0HJ <jaevans@codenet.net>
- 47) [18283] Re: CQC QSO Party Multi-op: AB7TT and Murphy
by Ken LaRose <kenlar@csolve.net>
- 48) [18284] Electronic ink
by ac5ez@webtv.net (Larry B)
- 49) [18285] Re: Aurora Alert 23-26 August
by Steven Weber <kd1jv@moose.ncia.net>
- 50) [18286] SST question and observations
by Allan Taylor K7GT <k7gt@qsl.net>
- 51) [18287] Favorite references
by jeverhar@cse.l-3com.com
- 52) [18288] Is 1 a prime number?
by Jay Sullivan <jsulliv@vt.edu>
- 53) [18289] Re: Apples and Oranges
by "Tracy, Michael, KC1SX" <mtracy@arrl.org>
- 54) [18290] West Virginia 2XQRP
by "Ed Hare, W1RFI" <ehare@arrl.org>
- 55) [18291] Front end filters
by Steven Weber <kd1jv@moose.ncia.net>
- 56) [18292] Re: Is 1 a prime number?
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 57) [18293] Re: Front end filters
by jeverhar@cse.l-3com.com
- 58) [18294] Re: Is 1 a prime number?
by Jay Sullivan <jsulliv@vt.edu>
- 59) [18295] Re: Is 1 a prime number?
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 60) [18296] XTAL 456.350
by "DONALD G. DORN" <DDORN@swbell.net>
- 61) [18297] RE: Discriminators
by Tracy@bytemark.com (Tracy)
- 62) [18298] Re: Is 1 a prime number?
by "Ed Hare, W1RFI" <ehare@arrl.org>
- 63) [18299] Homebrew Expedient Antenna Insulators -- Help!
by Ed Loranger <we6w@qsl.net>
- 64) [18300] PIXIE MODs
by Sam Billingsley <SBillingsley@usaninc.com>
- 65) [18301] Copying Code.
by Ed Loranger <we6w@qsl.net>
- 66) [18302] 2SD2583 Help
by "Joe Spencer" <joes@tcjc.cc.tx.us>
- 67) [18303] One a prime/other Zombie stuff

- by Paul Harden <pharden@aoc.nrao.edu>
- 68) [18304] BUBBA Summer QRP Sprint this Sunday
by Joe Gervais <vole@primenet.com>
- 69) [18305] Re: MF thru HF general coverage receiver
by Ed Tanton <n4xy@att.net>
- 70) [18306] Re: Copying Code.
by KC5TJA <kc5tja@topaz.axisinternet.com>
- 71) [18307] Re: Copying Code.
by Ed Loranger <we6w@qsl.net>
- 72) [18308] CQC QSO Party W0CQC Report
by "Marshall Emm" <mgemm@mtechnologies.com>
- 73) [18309] Re: 72/73
by "Marshall Emm" <mgemm@mtechnologies.com>
- 74) [18310] Kc1 question
by Scott Howell <showell@hq.nasa.gov>
- 75) [18311] Re: Homebrew Expedient Antenna Insulators -- Help!
by "Michael A. Gipe" <mgipe@reliablemeters.com>
- 76) [18312] Dentron qrp 75m ssb/cw \$100(needs work)
by W7LS <w7ls@blarg.net>
- 77) [18313] Zombie warning!
by Stewart Whitehouse <STEW_W@compuserve.com>
- 78) [18314] ARCI Award
by kq0i@juno.com (Mark R Milburn)
- 79) [18315] Re: QRP-L digest 1192
by Jeff Logullo <jeff.logullo@Central.Sun.COM>
- 80) [18316] Re: Is 1 a prime number?
by "Brian.Buydens@usask.ca" <buydens@duke.usask.ca>
- 81) [18317] Re: Is 1 a prime number?
by Conway Yee <cyee@bidmc.harvard.edu>
- 82) [18318] Prime numbers
by Roger Hightower <n7kt@earthlink.net>
- 83) [18319] Re: CQC QSO Party Multi-op: AB7TT and Murphy
by gsurrency@juno.com (Gary L Surrency)
- 84) [18320] Re: MF thru HF general coverage receiver
by "Karl Heimbach" <heimbach@concentric.net>
- 85) [18321] Re: 72/73
by Steve <smann@advi.net>
- 86) [18322] Re: Homebrew Expedient Antenna Insulators -- Help!
by "Roy Lincoln" <wa4dou@mailexcite.com>
- 87) [18323] Re: West Virginia 2XQRP
by "Beaks" <beaks@westco.net>
- 88) [18324] Re: Homebrew Expedient Antenna Insulators -- Help!
by Ed Loranger <we6w@qsl.net>

Date: Sun, 23 Aug 1998 17:06:47 -0600 (MDT)
From: Paul Harden <pharden@aoc.nrao.edu>

To: qrp-1@Lehigh.EDU
Cc: GQRP-L List <qgrp-1@blacksheep.org>
Subject: [18237] SOLAR 8-23: Some storming
Message-ID: <Pine.SOL.3.91.980823164644.5978B-100000@zia>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

SUMMARY (for those not wishing to read the whole thing).

In recent days, numerous M-class and X-class flares, along with a Coronal Hole, are keeping our geomagnetic field unsettled to periods of occassional minor storm levels.

This is why the bands (20M and above) are a bit noisy and mushy for the CQC contest and other activities. Expect ups and downs in band conditions over the next 3 days, though nothing severe.

> JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
> SDF NUMBER 235 ISSUED AT 2200Z ON 23 AUG 1998

> IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 22/2100Z
> TO 23/2100Z: SOLAR ACTIVITY WAS MODERATE.
> REGION 8307 (N31E22) PRODUCED AN M2/1N FLARE AT 23/0934Z WITH A 2695 MHZ
> BURST OF 500 SFU (solar flux units).

> IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BECOME
> LOW TO MODERATE.
> ONLY OCCASIONAL M-CLASS EVENTS ARE EXPECTED FOR THE NEXT THREE DAYS.
> X-CLASS FLARES REMAIN SLIGHTLY POSSIBLE FROM THIS REGION THAT
> PRODUCED A TOTAL OF 4 X-CLASS EVENTS EARLY IN ITS VISIBLE HEMISPHERE
> TRANSIT.

4 X-class flares from a single region is a fairly fantastic event. Though now "settling down," this region will rotate across the sun's disk for another week, then re-emerge 3 weeks from now. While X-class flares can wipe out the Earth, these occurred near the limb, so we are on the fringes of their effect. Although those "fringes" are enough to keep out geomagnetic field unsettled to active.

> IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 22/2100Z TO 23/2100Z:
> THE GEOMAGNETIC FIELD WAS UNSETTLED AT MIDDLE LATITUDES AND UNSETTLED
> TO MINOR STORM LEVELS AT HIGH LATITUDES. THE MOST DISTURBED PERIOD
> WAS FROM 23/0000-0900Z. RECENT SOLAR WIND DATA SHOW AN INCREASE OF
> SOLAR WIND VELOCITY TO NEAR 600 KM/S AND DECREASE OF DENSITY TO 2-3
> P/CC. THESE PARAMETERS INDICATE THE EARTH IS EMBEDDED IN A CORONAL
> HOLE STREAM. MAGNETIC DATA IMPLICATE THE EQUATORWARD EXTENSION OF
> THE NORTHERN CORONAL HOLE AS THE SOURCE OF THIS STREAM.

Normal solar wind is around 200 km/sec. A coronal hole allows heavy particles to escape the sun, traveling along with the solar wind. This coronal hole is near the center of the sun, so its outflow of particles is directed right at Earth ... causing the geomagnetic disturbances. As it continues to rotate across the solar disk, its effect on our geomagnetic field will diminish.

> IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD SHOULD
> CONTINUE AT PREDOMINANTLY UNSETTLED TO ACTIVE LEVELS THROUGH 24 AUG.
> MINOR STORM INTERVALS ARE POSSIBLE DURING THAT TIME. A SLIGHTLY MORE
> INTENSE DISTURBANCE IS EXPECTED ON 25-26 AUG AS A RESULT OF THE M9
> FLARE AND SUSPECTED CME OF 22 AUG.

The Coronal Mass Ejection (CME) is "suspected" only, since it was the SOHO satellite that could verify most of these events. Thus, the intensity of the CME can only be "guestimated" with current instruments.

> ACTIVE TO MINOR STORM LEVELS WITH
> ISOLATED PERIODS OF MAJOR STORMING ARE POSSIBLE FOR THAT PERIOD.

> IV. PENTICTON 10.7 CM FLUX
> OBSERVED 23 AUG 126
> PREDICTED 24 AUG-26 AUG 127/128/130
> 90 DAY MEAN 23 AUG 116

> V. GEOMAGNETIC A INDICES
> OBSERVED AFR/AP 22 AUG 013/023
> ESTIMATED AFR/AP 23 AUG 015/020
> PREDICTED AFR/AP 24 AUG-26 AUG 020/020-025/020-025/030

Predicted A-indexes of 20-30 are MINOR storm levels, although if the arrival of the CME particles is significant, the effects could be a major storm ... though not highly probable at this point.

72, Paul NA5N
National Radio Astronomy Observatory
Socorro, New Mexico

Astronomy is look up!

Date: Sun, 23 Aug 1998 18:09:12 -0500
From: applitech@mcg.net (Claton Cadmus)
To: <marsgal42@hotmail.com>, "QRP-1" <qrp-1@Lehigh.EDU>
Subject: [18238] Re: Somebody Software (was: re: CW Binaural Spatial Separation)

Message-ID: <015b01bdceeb\$2900da00\$a10a5e2c@groucho>

Laura answered in response to my question:

>> ...But I like many others already have a sound card in the
>> shack computer and if the software is already available what
>> could be easier?

>As for software availability, just as with radio designs,
>computer programs don't appear out of thin air. Somebody
>has to write them. Why can't that somebody be you?

Really, thin air, no kidding! Geez Laura, it was just a question, a query, a sudden want to know. It's not my life quest. I wish I had the time and skill to write every piece of software I needed or wanted. Alas, my programming skills ended with dos basic, I haven't a clue how to program in a Windoze environment.

Presently I have an SW-40 to finish, pic programmer to build, pic programming to learn =8-], a HB Short Wave Regen on the bench, a house to paint, MNQRP Newsletter to get out, two girls in college(moving one next weekend), a 6 meter converter on the drawing board, my business to run (which takes far to much time), an indoor loop antenna trombone capacitor to build, a solid brass paddle with ball bearings based on the Norcal design in the works, morse code to study, etc. etc. etc. Did I mention I have a wife and life too! At least I did last time I slowed down enough to look. Not only that, I've got three other hobbies that need a bit of time too. My plate's so full it takes two hands to hold it. But then who's isn't.

>Just as with hardware designs, we hams *are* expected to show
>a degree of technical expertise with the tools we use.

There was nothing in the test I took or rules I've read that said I was expected to know something about computer programming. Besides, most of that stuff I mentioned above requires lot's of tools. My workshop is 30 feet by 15 feet and replete with tools I have more expertise with then I care to. Programming just isn't anywhere near the top of the list.

>And software doesn't get much simpler than this.
>You could use the window method and work the integrals out
>by hand on this one. Easy!

If it's so easy for you, please please go and do it. It would take me weeks just to learn how to start the programming. It would appear you have a good handle on how to go about it right now. Heck, I can't even remember what an integral is, let alone work one out. And on top of all that, even if I knew how to

do the programming I still would have asked if there was any software already written because I just don't like reinventing the wheel.

73 de Cla

Date: Sun, 23 Aug 1998 19:56:03 -0400
From: Bill Boose <wboose@ptd.net>
To: qrp-l@Lehigh.EDU
Subject: [18239] replies
Message-ID: <3.0.1.32.19980823195603.00d3ffbc@postoffice.ptd.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Why do some people think that replies to their queries would only interest them? Isn't that one reason many of us read this list?---to get the answers to questions others ask? I, for one, would like to know these things!

Bill Boose, N3WST, Lititz, PA

Date: Sun, 23 Aug 1998 17:18:16 -0700
From: Wes Hayward <w7zoi@mail.teleport.com>
To: qrp-l@Lehigh.EDU
Subject: [18240] Apples and Oranges--September QST
Message-ID: <35E0B148.6F2C@mail.teleport.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The September QST is just out with some spectral displays published. In one case, the paper by K7TAU and me contains the spectral output of a QRP kit popular a few years ago. (Fig. 14, p39, Sept 98 QST) The photo shows a sweep that spans from about 100 kHz up to about 16 MHz. The proliferation of spurious responses is evident. These spur frequencies are the direct result of the mixing and frequency scheme used in the transceiver. The magnitude of many of the spurs is the result of inadequate filtering within the transceiver and, probably, ground loops

on the circuit board. While there are many spurs, they are within current FCC specification limits. A spur measurement is also shown for a simple VFO/doubler/amplifier type transmitter.

The same QST issue presents a review of a kit from Ten-Tec. The review was largely devoted to the kit process, with little information presented about the end product. This is probably fitting for the market. The review included a spectral output. Tom Lundeen, KE4JZK, noted in an August 20 QRP-L posting that the Ten-Tec spectral output was outstanding. But, it is not. The output presented in Fig. 7 of the review is a different measurement. That data presents a phase noise evaluation, the spectral density of phase noise normalized to a 1 Hz bandwidth close to the carrier. This "composite noise test" only shows outputs very close to the carrier. The review also did the measurement we did to examine transmitter spectral purity with a result of 47 dB. This is within FCC specifications at this time and is similar to the result we presented for the kit we measured.

The phase noise performance presented in Fig. 7 of the review (page 76, August 98 QST) is outstanding. This is clear when the data is compared with similar data presented a few pages earlier for a high-end MF/HF/VHF transceiver. The performance difference has nothing to do with the Ten-Tec 1340 being a QRP rig. Rather, it is the result of NOT using a synthesizer in the 1340.

While the LO purity is stellar, it's hard to see how Ten-Tec only managed a 75 dB two-tone dynamic range in the 1340 receiver with a published 1 kHz bandwidth and JFET mixer front-end. The poor performance is probably compatible with the low kit price.

It was confusing to have the LO composite noise plot presented in the review when the greater interest is in overall transmitter spectral purity. I suspect the ARRL lab staff merely performed a standard test for transceivers. Perhaps it's time to encourage real reviews of QRP rigs within the various QRP club journals, allowing us to see how the boxes really perform. Ultimately, the kit prices would probably increase a bit, but the performance increase could be greater. What do we want?

Wes Hayward, W7ZOI

Date: Sun, 23 Aug 1998 20:28:24 -0400 (EDT)
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
To: Dean W Manley <kh6b@juno.com>

Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [18241] Re: NERDS Contest - Antenna ideas?
Message-ID: <Pine.GS0.3.96.980823201707.20038C-100000@moe.cas.utk.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

A lot of good ideas have appeared, but consider one more factor.

Horizontal antennas are likely to be hung low. If you live on the US east coast and expect a lot of the action to be within 1000 miles, then these horizontals make a lot of sense--and for simplicity, a center supported Vee or an EDZ hung as a Vee with and ATU are good (but not the only good) choices.

However, if you live in a sparsely populated west or are isolated in Alaska or Hawaii relative to the anticipated gang, you might consider a vertical form or vertically polarized antenna for the lower T0 angle.

Other possibilities: W7EL's Field Day Special (a version of the ZL Special using 300-ohm twinlead--set up as a reversible direction beam; a wire Yagi set up the same way, a 2-element Delta/rectangle/half square also set up to be reversible, or even a wire Moxon set up for reversible use. All these give gain over the basic, can be set up with light rope frames, are not much heavier than a basic antenna for the field, and offer a greater challenge than the most common forms.

At quite thin diameters, most rope (or twine, since one is at the borderline of that classification change) is stronger than wire. so making up the antenna shape and support all of rope.twine and then just taping the wire to the rope become a sensible procedure to make the thing as light as possible, yet durable for a contest or field duration.

There is no one right answer to the question: it is all a matter of where you are, what the operating site is like, how much ingenuity you want to exert, and a host of other factors that make what is best unique to each operating point.

-73-

LB, W4RNL

Date: Sun, 23 Aug 1998 16:32:33 -0800
From: "Jim Larsen (AL7FS)" <larsennc@alaska.net>

To: "qrp-1@lehigh.edu" <qrp-1@Lehigh.EDU>
Subject: [18242] CQC Contest
Message-ID: <35E0B4A0.C2C9A43D@alaska.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Well, that was difficult. Almost all openings for QSOs lasted less than 4 minutes. Often less than the length of one QSO. Here's a quick list just for fun. I hear it was no bed of roses down south but even with S9 noise, N4BP more than doubled my QSOs in just a short time.

That's Ok. I had fun.

73, Jim, AL7FS

UTC
1848 we6w ca
1852 w5vbo az
1859 kb7mbi wa
1914 n0ibt co
1923 k7tq id
1949 ki0ky co
2029 n7mfb wa
2031 kn6yd ca
2053 kb7ww or
2059 k17cc ak
2127 k0evz mn
2153 k0frp co
2157 k4bai ga
2201 af5z nm
2214 ab0cd co
2345 k5zty tx

Date: Sun, 23 Aug 1998 16:28:54 -0600
From: tom whalen <whalen@swcp.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [18243] Contest!
Message-ID: <35E097A5.42A7@swcp.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

QRP-Ler's!

Well, the contest is over and sure had a good time. Made about 20 Q's and Murphy only struck me once!

Used the Emtech 20 with a 20m EDZ inverted vee up about 20' over a million gallon water tank! May have to come up with a vertical to use next contest and put that tank to good use!

Don't forget next weekend is the BUBBA contest. Hope it is 100f here next weekend!

72, Tom WB5QYT

Date: Sun, 23 Aug 1998 20:34:33 -0400 (EDT)
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
To: Arjen Raateland <Arjen.Raateland@vyh.fi>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [18244] Re: choke balun heat shrinking experience
Message-ID: <Pine.GS0.3.96.980823203110.20038D-100000@moe.cas.utk.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

One extra trick on using heat shrink tubing with beads. One commercial maker has used O-rings (available in many sizes for plumbing purposes) at the ends of the string of beads--Use as tight a fit to the coax as possible. I suppose that if you wish the beads spaced, you could use an O-ring between beads, although since the heat tends to concentrate in the beads closest to the antenna end, you might want them just touching to transfer heat away from that point.

-73-

LB, W4RNL

Date: Sun, 23 Aug 1998 17:24:53 -0700
From: "Eric Swartz (WA6HHQ), EleCraft - JAPAN" <erics@elecraft.com>
To: qrp-l@Lehigh.EDU
Cc: n6kr@elecraft.com
Subject: [18245] Looking for QRP contacts from JA this Monday PM

Message-ID: <35E0B2D5.1575@elecraft.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

Hi,

I will be trying to make it from JA to the US and other areas with my K2 and SLV antenna tomorrow (Monday in the US). I plan to head out to a local mountain to the north of Tokyo in Chiba Prefecture.

The most likely frequency will be 14.060 +/- . I will be using the club call JE1ZDX. I expect the times I will be on will be around 0000Z - 0500Z.

If anyone has time, please listen for me. It will be a lot of fun to be on the other side of a QRP DX qso for once! (Feel free to email me. I will check into my email at least once more before I go.)

I will post more details on time and other possible freq's later as my plans firm up.

72, Eric-san WA6HHQ / JE1ZDX

erics@elecraft.com
<http://www.elecraft.com>

Date: Sun, 23 Aug 1998 21:01:35 -0400
From: cy r currier <crc3@telplus.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>, "'n4xy@att.net'" <n4xy@att.net>
Subject: [18246] RE: S&S "M1" marches on ...
Message-ID: <01BDCE9.EB30A220@bgr105.lobster.net>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

yes, but tim was talking about a carbine. 1/2 the weight, twice as many shells for the same bulk, still a 30 cal but not as muchumph. cy k1tes

From: Ed Tanton

Sent: Sunday, August 23, 1998 2:26 PM
To: Low Power Amateur Radio Discussion
Subject: Re: S&S "M1" marches on ...

Does this mean my thumb will be-once again-in jeopardy after all these years?

///snip Donald E Sanders wrote:
>I bet you change bands by changing band "clips"
>Donald E. Sanders W4BWS
///snip

///snip Tim Ahrens <tahrens@inetport.com writes:
>>Is it a carbine? hehe
>>Tim W5FN
>>> With a name like "M1" -- designed by a military receiver
>>> guru -- do you suppose this thing will have a bullet-proof
>>> front end? Good chance of that, I'll bet ;)
>>> 72 - Conrad Weiss - NN6CW
>>
///snip

For the benefit of the younger generation: when releasing the bolt mechanism on an M1 rifle, one inserts his thumb into the opened rifle (during an inspection or cleaning for example) and depresses a certain part within the rifle. He then immediately and expeditiously withdraws said thumb, lest the spring-loaded mechanism attempt to insert it into the chamber instead of the much more appropriate rifle cartridge it is supposed to be inserting. Typical results include certain colorful expressions and a very colorful thumbnail-which typically drops off after a while, and is properly replaced in due time. Hence the expression: "M1-Thumb".

The M1 Garand rifle was an excellent military rifle in its day, when one attempted to actually aim at things in order to to shoot them-as opposed to most of the modern "assault" weapons where one simply sprays in the general direction of choice, and thence on up into the sky. It worked well under terrible conditions, and-as far as I know-contained no plastic nor was ever subcontracted to any toy manufacturers. With a name like M-1, the S&S transceiver will have a lot to live up to.

73

Ed Tanton N4XY EMAIL: n4xy@att.net
189 Pioneer Trail
Marietta, GA 30068-3466 TEL: (770)579-3933 V/MBX/FAX

INTERESTS: QRP BoatAnchors Test Equipment Photography
CW: 99.9% Mercury Paddle # 0214 QRP to 150W: 95%

~~~~~  
"Think you can, think you can't: either way you're right!" Henry Ford

~~~~~

Date: Sun, 23 Aug 1998 18:33:59 -0700
From: Dave Willey <dave@cds1.net>
To: Monte Stark <ku7y@dri.edu>
Cc: QRP-L <qrp-l@Lehigh.EDU>, ka5s@saber.net, ken@cds1.net
Subject: [18247] The Alcatraz trip pictures (Warning not totally QRP...yet)
Message-ID: <35E0C306.F1F@cds1.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Monte Stark wrote:

> Hi Dave,

> When you have a QRP station going from one of the unuas1
> places during a contest like IOTA or such, how about
> doing a write up with some pictures for the NCJ?

> Just tie it into Contesting, QRP and Fun!

> Thanks,

> 73, Ron, SOWP 5545M,

Hi All,

(Just for FUN!)

Not exactly QRP (yet) but the Sonoma County Radio Amateurs
have been doing Mini DXpeditions for a couple of years now,
with each trip using less and less output power. Hopefully
next year we'll go full QRP.

SCRA's web page is:

<http://cds1.net/scra/>

More to the point, since Ron and several others want to see pictures,
try:

<http://cds1.net/scra/alcpics.html>

But my fav. picture is:

(Warning - not for the humor impaired!)

<http://cds1.net/shortskip/al23.jpg>

Actually this is Ken N6MHG the club Webmaster & the keeper of the SCRA's great Webpage. And yes, we had blue t-shirts made up that said "INMATE" across the back, and "Escape TO Alcatraz" on the front. Got some rather "STRANGE" looks from the island's visitors. One lady saw us doing our 4 hours of volunteer yard work (4 hours per person gets each volunteer one nite in a cell in "D Block". She saw INMATE on our backs and about had a heart attack trying to get her little kid away from us. Total melt-down. Of course we're hamming it up.

BTW - Next weekend we're going to Angel Island in San Francisco Bay. I know of at least 1 MFJ 6-meter QRP rig going along as a stow-away. Contact Cortland - KA5S for setting up an operating skeds at:

ka5s@saber.net

These trips are a blast. 100% laid back and FUN. Why doesn't (Insert your local QRP group's name here) do a trip to a point of interest? Lots of neat places all over the USA (Or in your own country for those outside of the USA.) So what if you make 2 or 200 contacts. It's just a chance for QRP'ers to get together & have FUN face to face in a neat place.

And a side note...QRP rigs/ ant/ and power sources are a WHOLE lot easier to haul around and set up than the SCRA's WWII 2 TON military 5+ KW semi-unmuffled genset trailer!!!!

72 de Dave - KD6KWM

--

To send a reply please remove "NOJUNKMAIL" from the return address, and replace "AT" with "@"

Dave Willey

e-mail: dave AT cds1.net

amateur e-mail: kd6kwm AT cds1.net

amateur packet: KD6KWM@KD6KWM.#NCA.CA.USA.NOAM

--

QRP-L #1567

Date: Sun, 23 Aug 1998 20:43:34 -0500
From: Bob Liesenfeld <wb0poq@visi.com>
To: qrp-1@Lehigh.EDU
Subject: [18248] Re: bandpass filters
Message-ID: <35E0C546.685266AD@visi.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Roger Braker wrote:

>
> Hi Guys,
> Does anybody know why the ARRL handbook doesn't have design info for
> bandpass filters? Also where can I find such information?

Hi Roger,

I have written a simple BASIC program that allows one to calculate 2 pole Butterworth bandpass filters. It can be had at:

<http://sunsite.unc.edu/pub/Linux/apps/ham/butterworth-1.0.0.tar.gz>

It is a gzipped file, and is designed to run under BWBASIC with Linux, however, it should port to QBASIC (or whatever) without much trouble.

Feel free to drop me a line.

72

--

Genuine E-mail From the Land of the Everlasting Icicle...
Bob Liesenfeld
wb0poq@visi.com

Date: Sun, 23 Aug 1998 21:04:53 -0500 (EST)
From: bob evinger <revinger@marshallonline.com>
To: qrp-1@Lehigh.EDU
Subject: [18249] multiband loop, status
Message-ID: <Pine.LNX.3.96.980823205543.627A-100000@WD9EKA.ampr.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Well I have completed a not so clean multiband loop. It took most of the weekend to get it the point of using it. But I wanted to do it cheap first to see if it would be feasible to make a neater install later.

It started out to have 5 loops, oops forgot to tie the insulators in place on the corners so when I started pulling it up the towers it kind of shifted all over the place and the easiest thing at that point was to axe the 2 smaller ones which made it more manageable.

I have 2 45 ft rohns 35 foot apart, I went with a rope suspension and have a 30, 20 and 17 meter loop. I made the insulators out of 1/8 inch lexan as I had an ample supply. I also built an airplane and over time have replaced the windshield a time or two, so the lexan is still flying :)... I fed it with coax because that was what I had excess of, of course the swr is terrible but I was planning on using a tuner anyway. If it survives a couple of good windstorms maybe I'll buy some balanced line and play with it that way.

Only problem with it from an rf standpoint is that the #4 copper feed line from my wind generator runs down one of the towers and consequently when I start going above qrp levels I start to have rf induced seizures in my charge controller that require a power off reset to the controller to get it to report real numbers again. Oh well, I like running qrp anyway. :)

Now I can actually play on those bands with a semi-real antenna. GOing to try and see if there is anything left of the bands now that I am done running up and down my towers....

bob

Bob Evinger		19250 N. Livingston Road		revinger@marshallonline.com
WD9EKA		Marshall, IL 62441		

Date: Sun, 23 Aug 1998 21:14:50 -0500
From: Wes Spence <ac5k@ih2000.net>
To: qrp-1@Lehigh.EDU
Subject: [18250] Palomar Noise Bridge for Trade
Message-ID: <35E0CC99.72D6@ih2000.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Fellow QRPers:

I have a noise bridge made by Palomar Engineers in good working order that I would like to trade for back issues of QRP magazines. My QRP Quarterly subscription stopped about 2 years ago and have never subscribed to the others. Let me know what you have, and maybe we can work out a trade. I need to do some catching up with my reading!

72, Wes Spence, AC5K

Date: Sun, 23 Aug 1998 21:55:56 -0400
From: Rick Mintz <Rmintz@FRONTIERNET.NET>
To: QRP Newsgroup <qrp-1@Lehigh.EDU>
Subject: [18251] Re: KUDOS to Small Wonder Labs and thanks to group
Message-ID: <35E0C82C.C3A8574E@frontiernet.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Subject: Re: KUDOS to Small Wonder Labs and thanks to group
Date: Sun, 23 Aug 1998 21:51:46 -0400
From: Rick Mintz <Rmintz@frontiernet.net>
To: Jeffrey Herman <jeffreyh@Hawaii.Edu>

Jeffrey Herman wrote:

> In article <6rova7\$9i7\$1@as4100c.javanet.com>, Burt <burt@imfamous.com> wrote:
> >
> >How many times do I have to read messages from hams that send a
> >"Thank You" addressed to ALL. When one seeks help and
> >
> >So, why didn't you send your complaint to just him rather than
> >posting it world-wide. You're guilty of your own complaint.
> >
> >After all-the respondents to this call for help responded one by one.
> >
> >What does "all-the" mean? I've never seen those two words hyphenated.

Since I originated this message a few days ago I might as well reply briefly. It's not really worth too much of my time anyway.

Seems that it is OK to bitch and moan to the world at the slightest provocation. Should someone say thanks to

the ham community and publicly recognize the exceptional efforts of a vendor, this is a waste of precious bandwidth. Bull.

It would have taken much less effort to skip on to the next message than show the world that you grew up with little education in basic manners.

I certainly stand by my original posting. Make no mistake... should the situation arise again I will not hesitate to repeat my positive experiences. Maybe you should try it sometime. You must have something positive

to say about someone or something.

Just to annoy you... I SAY AGAIN... Thanks to the hams and Small Wonder Labs for their efforts in my behalf!

--

Rick, W1TY

Date: Sun, 23 Aug 1998 21:19:04 -0500
From: "Adam B. Kanis" <adam-kanis@uiowa.edu>
To: qrp-l@Lehigh.EDU
Subject: [18252] n2brt back on HF / SLV
Message-ID: <3.0.3.32.19980823211904.006db2d4@divis17.ped-gen.uiowa.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

hi all,

after nearly 3 months of no HF operations d/t bad work schedules then losing all my antennas (?ae) to a bad windstorm, i had my first QSO this evening.

thanks to help from several on the list, i got a St. Louis Vertical up, and connected to my tuner with twin-lead through the mobile home wall. after some minor realignment of my OHR-100 (40m), listened around (BTW-I really don't like the OHR-100's use of a separate side-tone oscillator instead of sampled transmit audio, it's just something else that needs to be kept aligned. i know somebody once emailed me a spotting mod, i need to dig that out.).

heard n8mat (sailboat mobile) call CQ on 7.040, gave him a call with my now rusty fist on the straight key (also needs some adjustment). he gave me a 459 from Lake St. Claire, MI. we had a brief chat.

i'm excited now. gotta get the SW30+ into a case and finish up the final check-out so i can check out 30m.

about the SLV - Nice system, using a fiberglass pole for the mast. I did have trouble understanding the spike stuff, so i made a base using a bunch of 1.25" PVC. It's about 1.5 ft square, and into a 1 ft piece that is sticking up is an unmodified wooden dowel whose other end goes into the base of the pole. the 1.25" pvc that sticks up, ends up supporting the pole 1 foot off the ground.

72,
--adam

Adam B. Kanis, N2BRT QTH: Wellman, IA (Near Iowa City) EN41ck
adam-kanis@uiowa.edu QRP ARCI : NorCal : QRP-L: G-QRP : CQC
** On the Web at <http://genome33.ped-gen.uiowa.edu/hamradio> **

Date: Sun, 23 Aug 1998 20:27:21 -0600 (MDT)
From: Paul Harden <pharden@aoc.nrao.edu>
To: GQRP-L List <ggrp-l@blacksheep.org>
Cc: qrp-l@Lehigh.EDU
Subject: [18253] Aurora Alert 23-26 August
Message-ID: <Pine.SOL.3.91.980823201324.10844A-1000000@zia>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Gang,
An Aurora Alert has been issued for enhanced auroral activity into the middle latitudes. While not QRP related, I get asked if there will be "northern lights" every time I post a flare report. So tonite, some of you may get your wish.

FOR EUROPE ... expect auroral activity throughout Sweden and Norway, southward into Northern England and Northern Europe.

FOR U.S./VE ... auroral activity is expected throughout Canada, southward into the U.S. extending from central Washington state, through central Michigan into upstate New York and New England.

Satellite imaging confirms auroral activity is occurring in the

northern portions of this area at the present time. This is the result of the numerous M and X class flares on the sun, from which the particle radiation, that fuels auroral activity, will occur from this evening through 26 August.

Hopefully, some of you will be rewarded with a spectacular display! For some of us, like me in the New Mexico desert, that is still a long ways away. Shucks.

72, Paul NA5N

Date: Sun, 23 Aug 1998 22:39:19 -0400
From: "Duane" <duane@flinet.com>
To: "qrp-l group" <QRP-L@Lehigh.EDU>
Subject: [18254] paying membership
Message-ID: <000701bdcf08\$657caf00\$af1a0ed0@flinet.com.flinet.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I need to know who to send my membership dues to for the QRPP journal. I will be paying by check for 2 years ok? please send information to duane@flinet.com not to the list.
thanks

Date: Sun, 23 Aug 98 22:23:20 PDT
From: "W. Keith Hibbert" <wb2vuo@frontiernet.net>
To: qrp-l@Lehigh.EDU
Subject: [18255] FS: FT-790R/ MK II
Message-ID: <MAPI.Id.0016.00623276756f20203030303630303036@MAPI.to.RFC822>
MIME-Version: 1.0
Content-Type: text/plain; charset="ISO-8859-1"; X-MAPIextension=".TXT"
Content-Transfer-Encoding: quoted-printable

This listing is for a fellow member of B/BAMS here in the WNY area. Please contact Lou directly on this rig, if interested...

Lou is selling a 2-year old Yaesu FT-790R/MK II because he can't read the=

display anymore. His vision has deteriorated enough in the last year =
that the "430/440" band icons are not discernable to him.

Rig is in great shape, runs the whole 70 cm band (430 - 450 MHz), all-mod=
es for you satellite guys and gals and has the CTCSS encoder board instal=
led.

Lou is asking \$475 plus shipping. His Email address is: cm598@freenet.bu=
ffalo.edu

72/73, Keith, WB2VU0, trustee at the NQ2RP club station
Listen for the NQ2RP/B beacon, 125 mW at 28.2876 MHz
"My night light runs more power than my Rig!!!"

Date: Sun, 23 Aug 1998 21:52:41 -0500
From: Kelly Ellison {WB0WQS} <kelman@dialnet.net>
To: qrp-1@Lehigh.EDU
Subject: [18256] CQC QSO Party - Results
Message-ID: <35E0D579.76F70ACC@dialnet.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Nice to hear so many familiar call signs on the air. The bands were in
"funny" Shape. Worked 23 QSOs the first hour and things looked good,
then my 3 year old boy needed some attention (they grow up too fast). I
got back on for about another hour and a half and worked some 40 meters.
total was about 55. Worked KL7JAF, KI7MN, W0CQC and many other
QRP-lers. Equipment was a QRP plus and a 280 ft loop tuned with a LDG
Tuner. Thanks to the CQC guys for a great QSO party! Hope to see you
all next weekend.

72,

Kelly Ellison
WB0WQS
SW MO

Date: Sun, 23 Aug 1998 23:33:24 -0400
From: David Fouchey <dafouche@jax-inter.net>
To: msebrakr@telepath.com, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Subject: [18257] Re: bandpass filters
Message-ID: <3.0.1.32.19980823233324.00802100@jax-inter.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

1998 Handbook PP 16.15-16 has design information on Bandpass filters..

Cheers!
73
Dave
WA4EMR

At 04:56 PM 8/23/98, Roger Braker wrote:

>Hi Guys,
>Does anybody know why the ARRL handbook doesn't have design info for
>bandpass filters? Also where can I find such information? I need to
>design a bandpass filter for 50mhz. Thanks for any help.
>
>
>73,
>Arnold kd5ckh
>
>
>
>

Date: Sun, 23 Aug 1998 23:37:24 EDT
From: we6w@juno.com (Ed Loranger)
To: qrp-1@Lehigh.EDU
Subject: [18258] CQC Sprint -- WE6W Summary
Message-ID: <19980823.203414.8159.1.we6w@juno.com>

Thanks for a wonderful contest! Really had
a blast.Ten meters opened up for 5 minutes here but b
the time I got there it was closed :(

Have just sent my log to <mailto:cqccx@mtechnologies.com>
reporting 44,200 points total. This includes the
1000 Points for working W0CQC, which I did on 3 bands!
What a gas.

40 Meters was trashed until the last 28 minutes or so, but managed
the following Q's:
40M:9, 20M:23, 15M:10
200 Pts, * 12 Names * 18 Spc's + 1000 for W0CQC!

I layed down after the contest and slept for
2 hours without moving. But my Bug didn't tire
my wrist -- I guess 24 hrs. at Field day running
a bug really has the wrist in shape. See ya for Bubba!

-Ed Loranger WE6W "72"
72, Ed WE6W QRP-Z#106 <http://www.qsl.net/we6w>
Enjoying Ham Radio every day! Santa Rosa, CA.

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Sun, 23 Aug 1998 23:48:58 -0400
From: "Wilford D. Lindsey" <70511.3041@compuserve.com>
To: //QRP-L Discussion Group <QRP-L@Lehigh.EDU>, "+Doc W.D. Lindsey/K0EVZ"
<70511.3041@compuserve.com>
Subject: [18259] CQC Test
Message-ID: <199808232350_MC2-571F-9B00@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

Gang:

Many thanks to everyone who dropped by today. Missed the start and
about 45 minutes of the last hour, but logged 71 QSO's. All but one
were on 20 Metres. Snagged N4BP on 15 Metres, the only station heard.
Highlights on 20 were AL7FS, HP1AC (at 1 watt), EA2AJB and KL7JAF.
Haven't taken time to figure a score yet.

It is always amazing how truly *LOUD* QRP signals can be :-). I heard
several 599+ signals during the afternoon. Wow.

Setup here = OHR-100A at 4 watts out (except the HP1AC QSO) to an IAC
Double Bazooka at 20 feet. Sure wish I could have gotten it higher, but
no joy. Used one of the 20-30 PVC antenna supports from Joe N2CX
(thanks Joe--great setup). Tuner = LDG QRP. Paddle = Shurr Profi to
CMOS-II.

Again thanks everyone for dropping by. Sorry for the poor fist at times.
Still trying to learn smooth CW after 38 years :-).

72/73,
--Doc Lindsey/K0EVZ Rochester, MN--Home of the Mayo Clinic.
MWBC
519-16th Street SE
Rochester, MN 55904
507/289-5108 (eves)

Date: Sun, 23 Aug 1998 20:58:21 -0700
From: ki6ds@dpol.k12.ca.us (Hendricks, Doug)
To: "'qrp-l@lehigh.edu'" <qrp-l@lehigh.edu>
Subject: [18260] QRPP Subscription Information
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: quoted-printable

Paul's posting about the next two issues of QRPP has=20
generated a lot of questions about subscribing to=20
QRPP. Membership in NorCal is free, but you must=20
pay to receive the journal, QRPP. Here is the=20
subscription information.

QRPP is published 4 times per year: March, June, September and December. =
Subscription fee is:=20

\$15 per year for US & Canada=20
\$20 per year for DX.=20

There is a 2 year limit to subscription=20
length at one time. In other words, we=20
will not accept a subscription for longer than 2 years.=20

To join the NorCal QRP Club send your name, call=20
and address to Jim Cates. There is no charge for=20
membership to NorCal QRP Club.=20

To receive QRPP, you must subscribe and pay the=20
fees. Send your money (US Funds ONLY) to:=20

Jim Cates=20
3241 Eastwood Rd.=20
Sacramento, CA 95821=20

Please make checks and money orders out=20

to Jim Cates, NOT NorCal.

As Paul noted in his earlier posting, the next issue will be devoted entirely to the Elmer 101 series. Mike Maiorana and Glen Leinweber have done a tremendous=20 job with the material and have been super in helping=20 out with the transcription from web material to printed page. The fall issue will also feature additional material by Gary Surrency on blueprinting your SW 30+ and SW 40+ to get 5 watts of power out. Bill Jones, KD7S, has an article on homebrewing your own cabinet out of plastic. It is a must read. It looks like now that it will be 80+ pages, and should be a great learning tool, thanks to the fine people on QRP-L.

My approach was to do the lesson, then the theory, with questions and = answers to follow. It was surprising how it seemed to flow together. Contributors include, Dave Benson, Mike=20 Maiorana, Glen Leinweber, Chuck Adams, Paul Harden, Mike=20 Gipe, Gary Surrency, Bill Jones, and a the rest of the gang at QRP-L.. The explanations and answers to the questions are especially well done by the authors. All of the material is there. All of the schematics, the SPICE outputs, the scope waveforms, Everything that was on the web pages, plus more.

But remember, if you want to get in on the fall issue, Jim must receive = your subscription before Sept. 15th, as we will print the mailing labels = on that date for the fall issue.

72, Doug, KI6DS

Date: Mon, 24 Aug 1998 00:30:43 EDT
From: ARDUJENSKI@aol.com
To: qrp-l@lehigh.edu
Subject: [18261] WANTED QF-1 INFO?
Message-ID: <2b0a660f.35e0ec74@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

I made copies of the QF-1 operating info and lost who wanted it. Send me an email direct with address.
Alan KB7MBI

Date: Mon, 24 Aug 1998 00:37:08 -0400
From: Tracy@bytemark.com (Tracy)
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [18262] Discriminators
Message-ID: <000401bdcf18\$daa12300\$29251ad1@titan>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Anyone direct me to a source of basic information on how they work to give us audio out of FM, and perhaps a schematic for a 9 MHz one?

Tracy N4LGH
QRP-L #1453

Date: Mon, 24 Aug 1998 01:17:48 -0400
From: mike czuhajewski <wa8mcq@erols.com>
To: QRP forum <qrp-l@Lehigh.EDU>
Cc: Mike Czuhajewski <wa8mcq@erols.com>
Subject: [18263] Receiver noise floors and audio voltmeters (long)
Message-ID: <35E0F77C.12DA@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

First, a little background since this involves a post back in June by Chuck Adams, K5F0. This appeared here on 14 June 1998 (ref Daily Digest #1122, message 13121).

Chuck said--

In the June 1996 issue of QEX, the ARRL's Experimenter's Exchange newsletter there is an excellent article by Ed Hare, ex-KA1CV now W1RFI and a lurker on this list. Title of article is "Swept Receiver Dynamic Range Testing in the ARRL Laboratory". The section of Noise-Floor Test Conditions was of interest to me.

1. Set receiver bandwidth to 500Hz, if possible or as close as you can get.
2. Set volume to comfortable listening level.
3. Measure output level of noise using audio meter.

4. Use Signal Generator and tune for maximum output.
5. Then crank in attenuator until you get 3dB greater than in step 3.
Or change level of Signal Generator.

Then from the attenuation and Signal Generator output level you can calculate the dBm level of the signal and this is the receiver's noise-floor sensitivity.

The setup being

Signal Generator --> Attenuator --> RCVR --> Audio Voltmeter

Ed and the ARRL Lab group uses a National Instruments AT-2150A 16-bit digital acquisition card. I'm told if you have to ask the price you can't afford it, so I won't :-).

So the question here is: Is there another way to do this using a sound card that already exists? A lot of people on the list may have already seen an alternative solution. My thinking here is that with systems with >200 MHz processors the FFT and spectral analysis is much easier to do now than back in the 4MHz days.

A diode detector would most likely not give the accurate results desired for this experiment. So many questions and so little time.....

(end of post)

I've already done tests just like this myself at home many times, and I did it without a computer with a data acquisition card, using an old HP analog audio voltmeter instead. (And I also did it with ancient signal generators with vacuum tubes!) There is no reason why this has to be done with a computer and expensive plug-in cards unless one needs extreme precision or is doing a computer automated test run. Just because this is the digital age and the computer age does NOT mean that analog is dead!

I receive a large number of trade journals at work (somewhere around 76, in a variety of fields), for which I often receive snide remarks from the people who handle the mail :-). One thought that I've seen pop up repeatedly over the years in several of the electronics journals, on the editorial page, is that for home use--or even for nondemanding use at work--there is absolutely nothing wrong with older test equipment that does not have all the bells and whistles, and may even be--<GASP!>--analog! There's still lots of good, older test equipment out there at good prices at hamfests, and it's still quite usable. It may not be fresh out of the calibration lab and may be a bit dirty and

beat up, but at least it still works well. (Or we hope it does, and that the seller isn't fibbing!)

But don't bother looking in any of those catalogs from places like Tucker, Test Equity (formerly RAG), Test Equipment Connection, etc, that sell reconditioned equipment unless you want some severe sticker shock :-). They totally refurbish things and make them like new, including fresh calibration, and that costs a lot. For our purposes we can be satisfied with things that we buy at hamfests, from individuals or the small test equipment dealers who hit hamfests. As always, caveat emptor, no matter who you deal with. And don't forget there are different types of dealers. Some just pick things up for pennies on the pound, sell them cheap, and have no idea what they do. (And occasionally they'll admit that, which is refreshing.) Others may well test them out at least minimally to make sure some of the main functions work, and others do thorough checks and give good warranties.

What I use for these receiver noise floor measurements is an old HP model 403B "transistorized AC voltmeter." It's a relatively high impedance (2 megohm) meter with response to 2 MHz, with 12 ranges going from a full scale reading of 0.001 volts RMS to 300 volts RMS. (The scales are also calibrated in decibels, which is quite handy.) Most of you have probably seen these at hamfests without realizing what they are. They seem to be relatively cheap of late, and I've seen them as low as \$25 several times this year, a good bargain if in reasonably good shape. They are good meters for measuring AC voltages such as audio. (I'd be VERY careful about using one to measure the AC power line, though.) They come in handy when building audio amplifiers, filters, etc and testing receiver sensitivity.

The size is 5 1/8" wide, 6 3/32" high and 8" deep. They have internal rechargeable batteries, which in most cases will probably be in poor shape due to the age. They also operate from the AC line, selectable between 115 and 230 VAC. If you buy one, check the AC connector and be sure you have something that matches it; buy one at the hamfest before you go home if you have to. They have two different styles of AC connectors, depending on the age of the unit. The newer ones use the 3-prong rectangular connector that is now used universally on computers, and everyone probably has a dozen around the house. But the older ones use an oblong power connector with 3 round pins. You can still find that style of power cord at hamfests if you look around, and you can also find them in places like the Newark catalog.

A nice thing about this meter is that the scale is calibrated in decibels in addition to volts. The dB scale goes from -12 to +2 on the standard model, and from -15 to +2 if the unit has Option 01. The option simply places the dB scale on the top of the meter instead of the voltage scale; the top scale covers the longest arc and thus has the

best resolution. (Both types have the dB scale.)

When measuring receiver noise floors, you measure the noise output on the audio line with no signal, pump in a signal until the output increases by 3 dB, and calculate the sensitivity. Using a meter like this which has a dB scale makes it quite easy; set the audio output so the meter reads at some convenient point on the dB scale with no signal input, then crank up the signal generator until it reads 3 dB higher.

Remember that the dB is a relative measurement, not an absolute. On the other hand, dBm IS an absolute, indicating decibels relative to a reference point of one milliwatt. Zero dBm is one milliwatt, +10 dBm is 10 mw, -10 dBm is 0.1 mw or 100 microwatts, etc. The HP 403B can be used to measure dBm, absolute power level, by reading directly off the meter in conjunction with the range scale, but this is only accurate if working in a 600 ohm system, which is what the scales are calibrated for. If operated at any other impedance you can no longer measure absolute power levels directly from the scale, although you can convert the readings to get it. But you can still read relative power directly in decibels right off the meter.

One word of caution about the 403B--sometimes it loves to peg the meter when switching ranges, even though the signal is well below the maximum permitted by those ranges. When I was in the Air Force and pegging meters was severely frowned on as potentially damaging, it took a while getting used to the 403B doing it sometimes, on its own. It was especially fun when going through maintenance evaluations with inspectors looking over your shoulder and having to explain to them that when the meter pegged it was a quirk of the meter circuitry and not your fault! I handled a lot of these meters during my USAF career, now that I'm retired I have two of my own, and believe me, they all do it. In fact, they even do it sometimes with no signal connected to the input :-). The meter will peg briefly, for perhaps a second or two, and then come back down. Sometimes it will even do it twice!

One little tip to keep in mind when using any analog meter with a range switch is to set it to the highest range before connecting test leads, hook them up, and then reduce the range until you get a usable reading. If you have it set to a lower range when connecting the signal, you might damage it with an overload. This used to be a well known practice, but now that we've had autoranging digital multimeters for years, which let us connect leads without doing anything more than setting a switch to AC VOLTS or DC VOLTS, we get spoiled and might forget this if we use an older, analog meter. (It's also important to observe test lead polarity with an analog meter if measuring DC, another thing that modern meters do for us automatically.)

I'll have this info in my Idea Exchange column in the October QRP

Quarterly, and maybe include a drawing of the meter. In future columns I might start showing some pictures of this and other test equipment that's useful to QRPers and homebrewers, along with a brief description of them.

--

73 and Queue Our Pea de WA8MCQ wa8mcq@erols.com

Date: Sun, 23 Aug 1998 22:51:58 -0700 (MST)
From: Joe Gervais <vole@primenet.com>
To: qrp-1@Lehigh.EDU
Subject: [18264] CQC QSO Party Multi-op: AB7TT and Murphy
Message-ID: <199808240551.WAA04181@usr09.primenet.com>

Howdy Folks,

Just got back home, will start attacking email in the morning, but wanted to give my official CQC QRP 'test report:

Summary: AAAARRRRRRRRGH!

I was travelling, so brought my QRP backpacking setup - SST-20, ZM-2 tuner (a little reminder of Roy), and 1/2-wave wire antler. Freed a few hours for the CQC 'test, set the station up - finally gonna get on the air! Antenna up, batteries ready, rig, tuner, cable, adapter... adapter... WHERE'S THE BNC-To-PL259 ADAPTER?!? NOOOOOOOO! JAN'S GONNA HATE ME!

Not a Radio Shack for hours either direction!
AAAARGH!

So that's my CQC log. :-(First time I've ever left a key piece of gear behind too. The QRP gods are smirking at me....

Hope everyone else had fun! Maybe I distracted Murphy long enough for the rest of you to have a good day.

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"And that, my Liege, is how we know the Earth
to be banana-shaped." -- Monty Python and the Holy Grail

Date: Mon, 24 Aug 1998 01:59:44 -0400
From: n2tpa@juno.com (Bill d Lazure)
To: dave@cds1.net
Cc: QRP-L@Lehigh.EDU
Subject: [18265] Re: Bench RF signal source...MFJ - 249?
Message-ID: <19980824.020116.7598.3.N2TPA@juno.com>

Dave Willey writes:

>I've been thinking about some source of RF for testing low power amps
after I get all of the parts together.
"anyone knows about a kit/ schematic for a 3 - 30 mHz at 500 mA signal
generator for bench work?"

Dave,

If you know Microcontroller programming at all, try the Analog Devices AD
9850/AD9851 Direct Digital Synthesis (DDS) ICs. I assume that one of
these, adequately controlled by a u-controller and run through one or
multiple MMIC amps would do the trick..

Once I find a source to learn microcontroller or PIC programming
myself (only 2 to 10 years away at the rate I'm going!!!), I hope to use
this chip as the VFO and quadrature generator for an R2.

Bill Lazure
N2TPA

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Mon, 24 Aug 1998 00:56:58 -0600 (MDT)
From: Paul Harden <pharden@aoc.nrao.edu>
To: mike czuhajewski <wa8mcq@erols.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>

Subject: [18266] Re: Receiver noise floors and audio voltmeters (long)
Message-ID: <Pine.SOL.3.91.980824002627.15148A-100000@zia>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Mike's description of performing your own noise figure tests is accurate and fun to do. He brings up a very good point that you don't need current day, expensive test equipment to make these measurements. As we build our rigs or assemble a kit, it is VERY worthwhile to make some measurements with the test equipment you may have. We are generally not interested in super accurate measurements, but a fairly "close" idea of what sensitivity (MDS) and selectivity (filtering bandwidth) we have. Do these things with the equipment you have, then you have a benchmark to evaluate mods or perform diagnostics when the rig gets anemic on you.

There is an equation that represents all of this:

$$-174\text{dBm} = \text{MDS} - \text{NF} - 10\log(\text{BWn})$$

where,

-174dBm = the ideal sensitivity of the perfect receiver operating at room temperate with a 1-Hz bandwidth

MDS = Minimum discernable signal (measured as that signal which causes an audio output 3dB above the noise as Mike described)

NF = Noise figure in dB

$10\log(\text{BWn})$ = noise bandwidth of the receiver filtering.

Note that Mike recommended setting your filtering to 500Hz if possible. $10\log(500\text{Hz})$ is 27dB. However, the NOISE bandwidth is generally 1.2 to 1.5 times wider than the CW bandwidth ... many people use 1.4 as an approximation. So if you have measured your filtering with a CW carrier to be 500Hz at the half-power points (3dB power, or 6dB on an AC voltmeter), then the NOISE bandwidth will be about $500 \times 1.4 = 700\text{Hz}$. $10\log(700\text{Hz}) = 28.5\text{dB}$. Measuring the MDS at 500Hz is an attempt to standardize measurements. Note that when you see MDS measurements for commercial rigs, such as in QST, it is generally based on 2.7-3.0 KHz bandwidth for SSB, for which $10\log(3000\text{Hz}) = 35\text{dB}$.

WHAT'S THE POINT OF THIS? Your minimum discernable signal (MDS) or sensitivity of your radio will be a direct function of how much prefiltering is performed before the mixer. This has been a discussion on QRP-L this past week. This is why QRP rigs often outperform the big boys, because our prefiltering is very tight, only a few tens of KHz to cover our range of interest. Commercial rigs must pass

the entire ham band, wider filtering, and thus to get the same MDS, they have to do some real engineering.

As Wes Hayward pointed out on QRP-L earlier, you can't compare apples to oranges.

So back to what Mike was explaining.

By rearranging the above equation to figure out the noise figure, you get

$$NF(dB) = -174dBm + MDS + 10\log(BWn)$$

So Mike's description was technically accurate. Measure the MDS, know what your filtering bandwidth is, subtract from -174dBm, and the remaining is the receiver noise level. With a DVM/VOM, even an old one like Mike was using, and an old signal generator with questionable output attenuation accuracy, you should be able to calculate your MDS, filter bandwidth, and hence noise floor to within 10dB. And that is actually pretty good.

Mike made a very good point ... don't let all the dazzle, bells and whistles of modern test equipment convince you the older stuff doesn't do the job. You can do some good engineering and measurements with what you have ... just learn how to use it.

(Good dissertation, Mike)

72, Paul NA5N

Date: Mon, 24 Aug 1998 00:50:34 -0700
From: "Bill Todd" <bill@willapabay.org>
To: <qrp-l@lehigh.edu>
Subject: [18267] My CQC Contest Adventure (sorta long)
Message-ID: <001601bdcf33\$e13e9a60\$214ffbce@default>
MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="-----_NextPart_000_0013_01BDCEF9.33F4C620"

This is a multi-part message in MIME format.

-----_NextPart_000_0013_01BDCEF9.33F4C620
Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

And, what an adventure it was...

=20

You see, I was doing two things at once. I was working the contest, but = every 15 minutes or so, I became Mr. Driveway Bodyshop Mechanic on my 81 = Nissan Maxima diesel. Yes, they made a diesel, and I bought one a few = months ago. It's not a bad car really - I get 33 mpg with a 6 cylinder = engine...but it always sounds like the car needs a valve job.

=20

When I bought the car, I noticed that the edges of the sunroof were = already rusted, and I discovered recently that the sunroof was leaking = water - not in the passenger area, but through the inner roof, all the = way back in the trunk! Weird.

=20

Anyway - there I was, making a few contacts, and then rushing out to the = driveway to do a bit more work on the soon-to-not-exist sunroof. I = ground all the rust away, including a fair bit of metal in the process, = zapped the resulting metal with Naval Jelly, cleaned all the jelly off, = and then gooped the Bondo all around the edges.

=20

Note: It is always a good idea to mix the hardening agent with the = Bondo, before you fill in all the cracks. I won't admit to anything. . = .but trust me on this.

=20

Back to the car. =20

After I cleaned up the excess Bondo (remember - I don't admit to = anything), I went back to the shack and made a bunch of QSO's on 20 = meters. The band sounded pretty good, and I made 10 contacts the first = hour, including my friend N0IBT (Dave) in Colorado, and Marshall at the = W0CQC Club station.

This time, I C A R E F U L L Y read the Bondo can, and mixed up a nice = batch of Bondo. I added a little extra hardener too - "what me worry?". =

After 2 minutes of slapping on the Bondo, the goop started to get very = thick - and another read of the instructions prompted me to use the = correct amount of hardener next time.

=20

The second hour of the CQC contest created 11 contacts. This is really = fun! I got to talk with Rich (W0HEP) again, and "The Great-and-powerful = (signal) Oz"...err, K0FRP, as well as the almost-equally powerful K4BAI = (John) and Ki0II (Ron).

By this time, my Bondo job looked pretty good, so I started sanding. = After I went through three sheets of paper, it looked like it needed = another coat of Bondo to smooth it out just a bit - but first, back to = the shack for more Q's. =20

The third hour I only managed 6 QSO's. By this time, it seemed like all =

the regulars had worked all the other regulars, but I did snag Jim in =
Alaska (AL7FS) and Gary in Utah (AB7MY) for two new Sections. =20

More Bondo and more sanding, and by this time I was thinking that I =
could make some extra income, doing part time body work - right in my =
own driveway! This Bondo is great stuff. No sign of rain - that's =
good.

The fourth hour produced only two contacts. What gives? I worked Bob =
in Texas (AF5Z) and Jess in California (KN6YD), but where did everyone =
else go? So, I thought that I had better finish up this body work since =
nobody seems to want to play radio.

The last coat of Bondo went on, and while it cured, I made the last of =
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N9DD (Tom). Got two new Sections out of that work.

The last of the sanding was finished, and I swear I could not even FEEL =
any rough spots, so I got out the "back-yard paint shop" can of paint, =
and did the deed. I soon learned that ONE can of paint was not going to =
do the trick, and that my "smooth" sanding job looked like my dreams of =
a second income as a driveway bodyshop dude was a bit premature! =
Anyway, two or three more cans of paint ought to hide some of the bumps =
(ha).

FINAL SCORE: =20
35 QSO's - 14 S/P/C's - 26 NAMES

All-in-all, it was a productive day, but between you and me...leave the =
bodywork to the professionals!

CUL, Bill-N7MFB
<http://www.willapabay.org/~bill>
ICQ me @ 8926298

-----=_NextPart_000_0013_01BDCEF9.33F4C620
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charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

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href=3D"http://www.willapabay.org/~bill">http://www.willapabay.org/~bill<=
/A>
ICQ=20
me @ 8926298</DIV></BODY></HTML>

-----=_NextPart_000_0013_01BDCEF9.33F4C620--

Date: Mon, 24 Aug 1998 06:35:09 EDT
From: TMcfadden@aol.com
To: qrp-1@lehigh.edu

Subject: [18268] Roy Gregson es EMTECH
Message-ID: <8c5d894e.35e141de@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

I feel kind of cheated. Like getting to the park and all of the rides are closed down. I feel this way because just one email to this list brought me many tips on the ZM-2 from Roy Gregson and now I do not get the privilege of knowing this man. From what I have heard he was quite a good man. My question now is, can I still order the ZM-2? Should I wait? Any help from those who would know will be greatly appreciated.

73 de Tim DA2TF/KB2RLB

Date: Mon, 24 Aug 1998 07:45:29 -0400
From: Rick Mintz <Rmintz@frontiernet.net>
To: qrp-l@Lehigh.EDU
Subject: [18269] Apology to Jeff Herman
Message-ID: <35E15258.E6B9F867@frontiernet.net>
MIME-Version: 1.0
Content-Type: multipart/alternative; boundary="-----ACDACDE1195D96B5202EE462"

-----ACDACDE1195D96B5202EE462
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Due to MY error I inadvertently directed my comments to Jeff Herman instead of the actual source in the posting, "Burt <burt@imfamous.com)". For this I humbly apologize to Jeff and want everyone else to know that he was not the source of of the negative comments.

I am sorry, Jeff. Please forgive my error.

Rick, W1TY

Jeffrey Herman wrote:

> Hey Rick,

> Learn how to read the attribution lines! Burt was the one who
> complained about your thank-you note, not me. Look at the "> >"
> line - it says "> > Burt <burt@imfamous.com) wrote:"
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> Since you flamed me publicly for what Burt said, now let's see
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>
> Jeff

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<P>Jeff</BLOCKQUOTE>
 </HTML>

-----ACDACDE1195D96B5202EE462--

Date: Mon, 24 Aug 1998 06:28:41 -0600
From: alan dawkins <alk0frp@earthlink.net>
To: qrp-1@Lehigh.EDU
Subject: [18270] cqz K0FRP
Message-ID: <35E15C79.CFDC1C49@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Bands were very poor. Had to make the best of it.
Lost 10 minutes on 40 m calling on my 20m beam , did not work well ????

30 Q's the first hour, took 2 hours more for the next 30 Q's and 3
hours for the next 30 Q's
65 Q's on 20m , 25 q's on 40 m , 9 Q's on 15m and 1 on 10m . WE6W was
the last one on 40m at 2352z
Worked Jan N0QT on 4 bands and guess who was my Only 10m Q.
FL, CA,GA, Panama and CO on 15m. Got Jim KL7FS on 20m and Cam HP1AC on
20/15m
Canada had a good showing with NB, QUE, SK, ONT, and BC.
Another fun contest Thanks for the Q's guys.

Al K0FRP

Date: Mon, 24 Aug 1998 08:33:09 -0400
From: David Fouchey <dafouche@jax-inter.net>
To: pharden@aoc.nrao.edu, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [18271] Re: Receiver noise floors and audio voltmeters (long)
Message-ID: <3.0.1.32.19980824083309.007ec9b0@jax-inter.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Paul I'll have you know that both your message and mikes are now archived
in my engineering directory. Great piece of work by both of you, thanks.
Now why don't the two of you collaborate and publish an article to help
demistify the issue for the rest of the community? Just a thought..

Again, TNX for the info.

72/73

Dave

wa4emr

At 12:56 AM 8/24/98 -0600, Paul Harden wrote:

>

>Mike's description of performing your own noise figure tests is
>accurate and fun to do. He brings up a very good point that you
>don't need current day, expensive test equipment to make these
>measurements. As we build our rigs or assemble a kit, it is VERY
>worthwhile to make some measurements with the test equipment you
>may have. We are generally not interested in super accurate
>measurements, but a fairly "close" idea of what sensitivity (MDS)
>and selectivity (filtering bandwidth) we have. Do these things
>with the equipment you have, then you have a benchmark to evaluate
>mods or perform diagnostics when the rig gets anemic on you.

>

> There is an equation that represents all of this:

>

>-174dBm = MDS - NF - 10log(BWn)

>

>where,

>-174dBm = the ideal sensitivity of the perfect receiver operating at
>room temperate with a 1-Hz bandwidth

> MDS = Minimum discernable signal (measured as that signal which
>causes an audio output 3dB above the noise as Mike
>described)

> NF = Noise figure in dB

>10log(BWn) = noise bandwidth of the receiver filtering.

>

>Note that Mike recommended setting your filtering to 500Hz if
>possible. 10log(500Hz) is 27dB. However, the NOISE bandwidth is
>generally 1.2 to 1.5 times wider than the CW bandwidth ... many
>people use 1.4 as an approximation. So if you have measured your
>filtering with a CW carrier to be 500Hz at the half-power points
>(3dB power, or 6dB on an AC voltmeter), then the NOISE bandwidth
>will be about $500 \times 1.4 = 700\text{Hz}$. $10\log(700\text{Hz}) = 28.5\text{dB}$. Measuring
>the MDS at 500Hz is an attempt to standardize measurements. Note
>that when you see MDS measurements for commercial rigs, such as in
>QST, it is generally based on 2.7-3.0 KHz bandwidth for SSB, for
>which $10\log(3000\text{Hz}) = 35\text{dB}$.

>

>WHAT'S THE POINT OF THIS? Your minimum discernable signal (MDS) or
>sensitivity of your radio will be a direct function of how much
>prefiltering is performed before the mixer. This has been a discussion
>on QRP-L this past week. This is why QRP rigs often outperform the
>big boys, because our prefiltering is very tight, only a few tens
>of KHz to cover our range of interest. Commercial rigs must pass

>the entire ham band, wider filtering, and thus to get the same MDS,
>they have to do some real engineering.
>
>As Wes Hayward pointed out on QRP-L earlier, you can't compare
>apples to oranges.
>
>So back to what Mike was explaining.
>
>By rearranging the above equation to figure out the noise figure,
>you get
>
> $NF(dB) = -174dBm + MDS + 10\log(BW_n)$
>
>So Mike's description was technically accurate. Measure the MDS,
>know what your filtering bandwidth is, subtract from -174dBm, and
>the remaining is the receiver noise level. With a DVM/VOM, even an
>old one like Mike was using, and an old signal generator with
>questionable output attenuation accuracy, you should be able to
>calculate your MDS, filter bandwidth, and hence noise floor to
>within 10dB. And that is actually pretty good.
>
>Mike made a very good point ... don't let all the dazzle, bells and
>whistles of modern test equipment convince you the older stuff doesn't
>do the job. You can do some good engineering and measurements with
>what you have ... just learn how to use it.
>
>(Good dissertation, Mike)
>
>72, Paul NA5N
>
>
>
>

Date: Mon, 24 Aug 1998 05:16:36 -0700
From: "Eric Swartz (WA6HHQ), EleCraft - JAPAN" <erics@elecraft.com>
To: qrp-l@Lehigh.EDU
Cc: n6kr@elecraft.com
Subject: [18272] Update on JE1ZDX times + freq's to US
Message-ID: <35E159A4.21B6@elecraft.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

I took a little time to listen to the bands tonight. I was able to hear W6 stations well past 0800z. Also took a listen on 10Mhz and 7Mhz. 7040 has SSB QRM and 10116 has a WEFAX station on it, so I will use alternate frequencies.

Here's my updated operating plan.

Time: 0200-0800z (Mon. and Tues. evening, US time)
Freq's: 14060, 10105, 18080 (all +/- 5 Khz for QRM.)

Time: 1200-1500z (Tues. morning, US time)
Freq;s: 7030, 10105

Call: JE1ZDX

I'll check 20m first and then go to 10MHz and 18Mhz and later to 7 Mhz.

If my CW is a little sloppy, it may be the Saki! Be nice...

72, Eric

Date: Mon, 24 Aug 1998 08:46:26 -0400
From: John Mckee <JMckee@RFMD.com>
To: "'QRP-L'" <qrp-l@lehigh.edu>
Subject: [18273] MF thru HF general coverage receiver
Message-ID:
<c=US%a=%p=RF_Micro_Devices%l=PACHACUTEC-980824124626Z-56216@proxy1.rfmd.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Hi Gang,

What is available in a good MF thru HF general coverage receiver under \$1000?
I'm interested in AM, SSB, and CW through 30MHz with good filtering, either built in or available as an option. Also would like to use it with my home brew qrp transmitters.

Thanks es 72,

John WB4OFT

jmckee@rfmd.com

Date: Mon, 24 Aug 1998 05:48:27 -0700
From: "Eric Swartz (WA6HHQ), EleCraft - JAPAN" <erics@elecraft.com>
To: qrp-1@Lehigh.EDU
Subject: [18274] QRP Bob Meets Sashimi...
Message-ID: <35E1611B.3454@elecraft.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
Content-Transfer-Encoding: 7bit

I've posted a picture of QRP Bob (KD6VIO) of Wilderness Radio eyeing his Sashimi (and it eyeing him back) on our web page.

<http://www.elecraft.com/JA/JA%20Show.htm>

Who says QRP'ers don't do it with style?

72,
Eric

Date: Mon, 24 Aug 1998 06:30:13 PDT
From: "Craig LaBarge" <labarge@hotmail.com>
To: qrp-1@lehigh.edu
Subject: [18275] PVC Dimensions
Message-ID: <19980824133014.1166.qmail@hotmail.com>
Content-Type: text/plain

Greetings:

I have a portable antenna experiment currently in the drawing board stage. Can anyone tell me the actual inside and outside diameters for Schedule 40 PVC pipe in the following nominal sizes?

3/4 inch
1 inch
1-1/2 inch
2-inch

Thanks & 73,

Craig WB3GCK

Get Your Private, Free Email at <http://www.hotmail.com>

Date: Mon, 24 Aug 1998 09:37:36 -0500
From: "George T. Baker" <w5yr@swbell.net>
To: wboose@ptd.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [18276] Re: replies
Message-ID: <35E17AB0.8220F051@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Bill, my perception of this situation is that of late there has been considerable "gentle persuasion" to limit posting content and quotations from prior postings. This has caused many people, including myself, to avoid posting to QRP-L even though the information might be of general interest.

I know that I have found it increasingly difficult to decipher some of the responses made to the list through the omission of quotations, such as I am doing here in the interest of brevity.

72/73, George didit dit
Amateur Radio W5YR, 52 years and counting! 33.2 N 96.6 W EM13RE
QRP-L #1373 QRP ARCI #9583 FISTS #4930 ARS #403 ICQ #16819496
AutoPOWER Systems, Fairview, TX (30 Mi. NE of Dallas) 10-X #11771

Date: Mon, 24 Aug 1998 08:06:27 -0700
From: "Radman" <radman@best.com>
To: <labarge@hotmail.com>, "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [18277] Re: PVC Dimensions
Message-ID: <199808241503.IAA08299@proxy3.ba.best.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Nominal size 3/4" - Schedule 40 - Wall = 0.113", OD = 1.050", ID = 0.824"
Nominal size 1" - Schedule 40 - Wall = 0.113", OD = 1.315", ID = 1.049"
Nominal size 1.5" - Schedule 40 - Wall = 0.145", OD = 1.900", ID = 1.610"
Nominal size 2.0" - Schedule 40 - Wall = 0.154", OD = 2.375", ID = 2.067"

Here's the URL for PVC pipe dimensions: http://pos.net/ref/pvc_pipe.htm

GL - 72- Conrad Weiss - NN6CW

Date: Mon, 24 Aug 1998 11:09:46 -0400
From: "Vincent Ferme" <vferme@sprint.ca>
To: <JMcKee@RFMD.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [18278] Re: MF thru HF general coverage receiver
Message-ID: <007d01bdcf71\$3c273b20\$c61205d1@vince>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi John,

There are very good receivers in the used market under \$1000.00. The ones that come to mind are:

Drake R-8B,
JRC NRD-535/545 and
AOR 7030.

If you want a new one, there are:

JRC NRD-345,
Yaesu FRG-100B and
Lowe HF-150.

I don't own any of the above. These are used by the serious shortwave listeners out there and received good reviews in the past.

73/72 de Vince, VE3VFN.

Date: Mon, 24 Aug 1998 11:16:03 EDT
From: ARDUJENSKI@aol.com
To: bill@willapabay.org, qrp-1@Lehigh.EDU, nwq-1@scn.org
Subject: [18279] 15M DELTA/PARASITIC
Message-ID: <c836d42b.35e183b4@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Bill,

For 15 M (or even 20) you may want to consider a DELTA with a PARASITIC off the same mast much like the INVERTED VEE we discussed. It would have a single mast with a base spacing between the two of 1/8 wavelength. The PARASITIC can either be a REFLECTOR or DIRECTOR based upon your desires. The REFLECTOR should give the better overall performance based upon my studies though. A 30ft plus apex would be desireable.

Can't wait for 12 Sept Bill....Alan KB7MBI

Date: Mon, 24 Aug 1998 16:19:44 +0100
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-1@Lehigh.EDU
Subject: [18280] K5FO email address
Message-ID: <199808241519.QAA08074@chuck.dallas.sgi.com>

Gang,

Within the next 24 hours my email account may disappear. That doesn't mean that something has happened to me, it just means that I have retired from the world of travel, tough schedules, and airport lounges. :-)

As soon as I get a new ISP I will be back. In the meantime I will be doing some catchup on fun stuff like articles, awards, kit building, etc. So let me know if you need me to move something to the top of the heap. :-) ;-)

I plan on two top priorities involving Pacificon and a book in the works relative to the QRP world as I know it. Film at 11 as they say.

So, if you have me in a file/alias/mailbox list/etc. You

Antenna committee will start work at K5FO's new QTH in a few hours. Look for RF on the high bands first. 40M when the foxhunt season starts up big time.....

Chuck Adams K5FO Dallas,TX CP-60
<http://reality.sgi.com/adams> adams@sgi.com

For anyone needing QRP Wyoming, I will be on the air Saturday, 29 Aug 98, from around 1500 for a few hours. I plan on working 20m near the QRP freq primarily, but will have a 40m and 30m rig as well. If you have any special interests, let me know via email and I will try to accomodate you. HI and SD will have QSO parties as well that day, so this could be a good time to get some tuffer than usual states.

John A. Evans	Chief Systems Administrator
Office: (719) 528-1800 x164	Titan Software Systems
Fax: (719) 528-1888	1115 Elkton Drive, Suite 200
email: jaevans@cos.cst.titan.com	Colorado Springs, CO 80907-3535

Norcal #262 QRP-L #219 QRP-ARCI #8303 NE-QRP #213 CQC #045
CQrp #15 NJ-QRP #50 AK-QRP #52 NW-QRP #454 FISTS #3184
Personal Web Page: <http://www.geocities.com/capecanaveral/9773/>

>
> So that's my CQC log. :-(First time I've ever
> left a key piece of gear behind too. The QRP gods
> are smirking at me....

>
> Hope everyone else had fun! Maybe I distracted
> Murphy long enough for the rest of you to have
> a good day.

>
No, Murphy made an appearance here too, Joe! Had thunderstorms for most of the day, with tornado warnings just north of us. Cleared up enough to set up on a hill just outside village of Wyebridge, ON. But, I forgot to bring the headphones!! With no speaker in the HW-9, it was necessary to drive back home (only 10 min. away) to pick them up. Got a late start, made 15 Qs before thunder and lightning returned, forcing my early retirement from the contest.

Had fun though, worked 20m only. Nice to bag west coasters N6MM and N7MFB, also HP1AC in Panama. Strongest sigs here were K4BAI and K0FRP.

72, de Ken VE3ELA Midland, ON Canada

Date: Mon, 24 Aug 1998 11:17:26 -0500 (CDT)
From: ac5ez@webtv.net (Larry B)
To: qrp-l@lehigh.edu
Subject: [18284] Electronic ink
Message-ID: <8752-35E19216-40644@mailtod-122.bryant.webtv.net>
Content-Type: Text/Plain; Charset=US-ASCII
Content-Transfer-Encoding: 7Bit
MIME-Version: 1.0 (WebTV)

FYI

Electronic ink

Using electronic ink, a flat panel display can be printed on top of nearly any material using printing presses. The resulting display is much less expensive than an LCD, draws 50 times less power, offers better contrast with higher resolution, and can be printed onto a flexible piece of paper or plastic.

Links:

E Ink <http://www.eink.com>

Larry Ac5ez

Date: Mon, 24 Aug 1998 10:53:50
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-1@Lehigh.EDU
Subject: [18285] Re: Aurora Alert 23-26 August
Message-ID: <3.0.3.16.19980824105350.26d7c34c@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>
>FOR U.S./VE ... auroral activity is expected throughout Canada,
>southward into the U.S. extending from central Washington state,
>through central Michigan into upstate New York and New England.
>

I hope the clouds brake tonight and we get a glimps. Been a while since we've seen any aurora. Only problem with living in the Mountians here is it's rare we have a clear night durring a major astronomical event!

20 was beter last night than the last few, but still not much from Europe, mostly SA coming through and only KW stations at that. Ended up monitoring the hurricane net on 14.325 MHz untill they gave it up about midnight. Hope you guys on the SE coast are batting down the hatches!

72,
Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

Date: Mon, 24 Aug 1998 09:25:31 -0700
From: Allan Taylor K7GT <k7gt@qsl.net>
To: qrp-1@Lehigh.EDU
Subject: [18286] SST question and observations
Message-ID: <35E193FB.2E6C@qsl.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The SST/40 I purchased from Bob, WA2HQQ, arrived Friday. I am in total shock as to how SMALL (!) it is! Bravo, Wayne.

I recently posted a query regarding extending the VX0 range. I have concluded to, at some future time, install a socket and acquire 3 or 4 custom crystals to allow coverage from 7001 - 7055. Playing with the

RFC and doubling up crystals, etc, is too high risk for me.

Can someone give me a QRP-L archives reference for a slight power out increase (MOD) for the SST/40? Private replies, please.

--

73 de K7GT

Allan Taylor (a.k.a. Grant) Pleasanton CA

email: k7gt@qsl.net

web page: <http://www.qsl.net/k7gt/index.html>

Date: Mon, 24 Aug 98 12:48:34 EDT
From: jeverhar@cse.l-3com.com
To: qrp-l@lehigh.edu
Cc: njqrp@njqrp.org
Subject: [18287] Favorite references
Message-ID: <9808241648.AA07094@train11.cse.l-3com.com>

Gang,

The subject of favorite reference books recurs on qrp-l frequently. One of my favorites came to mind a few minutes ago. Seems I was at a hamfest yeaterday and picked up some \$1/bag semiconductor assortments.

The task of sorting them and determining their worth can be daunting. In one bag I got about 100 CA3020 linear amps, a couple of CA3028s and a dozen or so CA3010's. Now since I used to work for RCA, I have one of the old RCA linear circuits data books.

Another ic bag had about 50 SN7490's (built a freq coutner with them 20 yrs ago!) and a bunch of old DTL chips.

In yet other bags I found a hundred 2N3393, a bunch of 2N4036, some 2N2925, 2N3904, 2N3905 and some 2N3994 devices. Also in the assortment were about 100 2N2905 and 2N2907 devices (no 2N2222's!). And the best bet was a bag with a dozen ECG CB output transistors!

All told I got about 200 ic's and close to 500 transistors, all for a total expenditure of less than \$10.00.

What this is leading up to is that I would have no idea of their value if I didn't have some of the old semiconductor data books. The data on ic's is scattered throughout a bunch of moldy old books. But the very best general reference (though dated) for transitors and diodes is the Texas Instruments

"The Transistor and Diode Data Book for design engineers." Mine has a copyright date of 1973 and it has long been out of print. However it frequently shows up at hamfests in piles of data books and usually goes for a dollar or so.

If you homebrew and like to identify hamfest bargains, this book can't be beat!

72/73,

Joe E., N2CX

Date: Mon, 24 Aug 1998 12:56:18 -0400
From: Jay Sullivan <jsulliv@vt.edu>
To: qrp-l@lehigh.edu
Subject: [18288] Is 1 a prime number?
Message-ID: <3.0.5.32.19980824125618.007d78b0@mail.vt.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

K5FO wrote:
>dit dit de K5FO QRP-L #1 and Zombie #1 (1 is a prime
>number BTW).....
>

I always understood that by definition 1 was *not* a prime number. Am I mistaken, or is his power over us not really that strong afterall? ;-)

Take care, and I hope we see you back soon!

Jay Sullivan
KC4WXB
Blacksburg, VA

Date: Mon, 24 Aug 1998 14:14:00 -0400
From: "Tracy, Michael, KC1SX" <mtracy@arrl.org>
To: "'QRP Email List'" <qrp-l@Lehigh.EDU>
Subject: [18289] Re: Apples and Oranges
Message-ID: <m0zB0G4-000ZhyC@mgate.arrl.org>

Hi Folks,

(This is only partially QRP, since it also applies to QRO rigs).
Generally, QST Product Reviews omit transmit spectral purity plots

because they only offer a small amount of visual information (perhaps 1-5

spurs in addition to the carrier) relative to the amount of occupied space. In instances where there are numerous spurs of a significant level, the Product Review Editor would either include the plot or add a

discussion of the spectral purity to the review text (or both).

Regarding the Ten-Tec 1340, the spectral purity was quite good for a relatively simple QRP rig. The spur at 47 dB down from the carrier was

at the second harmonic, 14 MHz. The next spur was 62 dB down and was near the carrier. Three other spurs about 65 dB down were also near the

carrier, with an additional spur at 68 dB down. Everything else was "down in the mud" (about 75 dB down). Not anything to complain about.

In homebrew rigs, this is the kind of result that only comes from experience. That is precisely what makes Wes' spectrum analyzer so valuable to the homebrewer.

72, Michael Tracy, KC1SX, ARRL Lab

Date: Mon, 24 Aug 1998 13:29:08 -0400
From: "Ed Hare, W1RFI" <ehare@arrl.org>
To: qrp-l@Lehigh.EDU
Subject: [18290] West Virginia 2XQRP
Message-ID: <35E1A2E4.311D@arrl.org>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hello, Gang,

This weekend I am attending the ARRL West Virginia convention, and will be driving there, so I am bringing my /M /QRP setup. I will have time for only limited operating, but to maximize the chances of working the West Coast, I will be operating around 2200-2400 Z on Friday and Saturday evenings (8/28 and 8/29). I will try both 14.060+- and 7.040+-. With limited time, I probably won't do much ragchewing.

If you need the state, email me and I will do my very best to make sure we QSO.

72, Ed Hare, W1RFI

Date: Mon, 24 Aug 1998 12:42:22
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-l@lehigh.edu
Subject: [18291] Front end filters
Message-ID: <3.0.3.16.19980824124222.2447176e@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I've always liked the idea of a two or three section slug tuned BPF for the front end, similar to what's in my old FT301. These aren't too common today, due to the mechanics involved in moving the slugs up and down.

I finally thought of a way to do the mechanics, and it will even be remotley tuneable!

I'm gonna use the laser head slider from a small portable CD player! I have a couple from dead players, and it looks like it will be pretty easy to adapt. Woun't be real tiny, but it will be a lot easier than rigging up shafts, gears and pullies. A couple of push buttons on the front panel will be all that's required to tune the filter!

Now, if I wanted to get real fancy, could even add a slider pot to give position, then use a uP to pre-position the slugs for different bands..

One more project to add to the ever growing list...

72,
Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

Date: Mon, 24 Aug 1998 18:45:35 +0100
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: jsulliv@vt.edu
Cc: qrp-l@Lehigh.EDU
Subject: [18292] Re: Is 1 a prime number?

Message-ID: <199808241745.SAA08831@chuck.dallas.sgi.com>

Jay,

I have been told by several that one is not a prime number.

But hey, it should be. :-) ; -)

Chuck Adams K5FO Dallas, TX CP-60
<http://reality.sgi.com/adams> adams@sgi.com

Date: Mon, 24 Aug 98 13:47:26 EDT
From: jeverhar@cse.l-3com.com
To: kd1jv@moose.ncia.net
Cc: qrp-1@Lehigh.EDU
Subject: [18293] Re: Front end filters
Message-ID: <9808241747.AA07171@train11.cse.l-3com.com>

Steve,

There were some postings a month or so back about usign the stepper and head positioning hardware from old disk drives. Same idea?

72/73,

Joe E., N2CX

>
> I've always liked the idea of a two or three section slug tuned BPF for the
> front end, similer to what's in my old FT301. These aren't too common
> today, due to the mechanics involved in moving the slugs up and down.
>
> I finally thought of a way to do the mechanics, and it will even be
> remotley tuneable!
>
> I'm gonna use the laser head slider from a small portable CD player! I have
> a couple from dead players, and it looks like it will be pretty easy to
> adapt. Woun't be real tiny, but it will be a lot easier than rigging up
> shafts, gears and pullies. A couple of push buttons on the front panel will
> be all that's required to tune the filter!
>
> Now, if I wanted to get real fancy, could even add a slider pot to give
> position, then use a uP to pre-position the slugs for different bands..

>
> One more project to add to the ever growing list...
>
> 72,
> Steve, KD1JV....In the White Mountains of New Hampshire
>
> "Melt Solder"
>
>

Date: Mon, 24 Aug 1998 14:11:26 -0400
From: Jay Sullivan <jsulliv@vt.edu>
To: adams@chuck.dallas.sgi.com (Chuck Adams)
Cc: qrp-1@Lehigh.EDU
Subject: [18294] Re: Is 1 a prime number?
Message-ID: <3.0.5.32.19980824141126.007b6400@mail.vt.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Chuck,

I was not trying to give you trouble. I just was trying to say, in a humorous way that we'll miss your presence from the list! I for one appreciate all the work you have put in to make this list a success. Even though I am mostly just a lurker, and a digesting lurker at that, I get a lot out of all the comments. I enjoy being a minimal part of the group.

Thanks again!

Jay Sullivan KC4WXB
Blacksburg, VA

At 06:45 PM 8/24/98 +0100, you wrote:
>I have been told by several that one is not a prime number.
>But hey, it should be. :-) ;-)
>Chuck Adams K5FO Dallas,TX CP-60

Date: Mon, 24 Aug 1998 19:23:11 +0100
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: jsulliv@vt.edu

Cc: qrp-l@lehigh.edu
Subject: [18295] Re: Is 1 a prime number?
Message-ID: <199808241823.TAA09233@chuck.dallas.sgi.com>

Jay et.al.,

I didn't consider it to be a problem at all. :-)

I enjoy working with the group and will continue to do so.
The past few months have seen me not having 'quality time'
for QRP-L like I used to have. But that is about to change,
obviously.

My new email address is going to be

adams@ticnet.com

BUT NOT until later in the week as soon as I get the
CD from them to use Netscape from the house.

OK gang, back to regularly scheduled programming.

I say, vote 1 in as a prime number. :-)

dit dit

Chuck Adams K5FO Dallas,TX CP-60
<http://reality.sgi.com/adams> adams@sgi.com

Date: Mon, 24 Aug 1998 13:25:29 -0700
From: "DONALD G. DORN" <DDORN@swbell.net>
To: QRP-L@lehigh.edu
Subject: [18296] XTAL 456.350
Message-ID: <35E1CC39.3231@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

A day or so ago somebody asked the list if anybody had a xtal near
456kHz. I did not pay much attention because I didn't think I had one. A
few minutes ago, while looking for something else I found one for
456.350. If you are still looking for one, whoever you are, and if this
one fits your needs E-mail me direct and it's yours.

72/73 Don K5AAR

Date: Mon, 24 Aug 1998 14:50:39 -0400
From: Tracy@bytemark.com (Tracy)
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [18297] RE: Discriminators
Message-ID: <001301bdcf90\$16b14b00\$29251ad1@titan>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

OK

So, I keep going back to the trusty 1996 ARRL handbook and the only reference I can find is a circuit using the MC3359. I have an MC3357, which is a bit stripped down from the '3359??

I've ripped up this handbook for any practical application of a discriminator, but that's the only one. Any other suggestions??

If anyone happens to have an 8.545 or 9.455 MHz crystal or an MC3359 they'd like to trade for something, drop me a note.

Thanks!!
Tracy N4LGH
QRP-L #1453

Date: Mon, 24 Aug 1998 15:01:21 -0400
From: "Ed Hare, W1RFI" <ehare@arrl.org>
To: qrp-l@Lehigh.EDU
Subject: [18298] Re: Is 1 a prime number?
Message-ID: <35E1B881.7BCD@arrl.org>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Chuck Adams wrote:

> Jay,

> I have been told by several that one is not a prime number.

> But hey, it should be. :-) ;-)

Perhaps that is why it is the loneliest number . . . :-) (dating myself!)

73,
Ed, W1RFI

Date: Mon, 24 Aug 1998 18:58:24 +0000
From: Ed Loranger <we6w@qsl.net>
To: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [18299] Homebrew Expedient Antenna Insulators -- Help!
Message-ID: <35E1B7D0.3098@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gangue, I tried to spare the list but dilligent searching
of my archives/links has been without success.

I once found a website that had wonderful photos of home
made antenna insulators for wire antennas. There were
two type -- Center and End insulators made form rectangular
plastic. Slots in the plastic provided efficient connection
of the antenna wire without running or tying the wire through
holes.

The site had views of a sloping antenna in the backyard. This
much I remember.

Does anyone have the website reference for me???

Please. I've just inherited a box with about 15 pounds of
scrap plastic display covers!

TIA Ed WE6W "72"

--

72, Ed WE6W (CW only/VP-0); <http://www.qsl.net/we6w> Santa Rosa, CA
QRP-Z#106 QRP-L#1068 AR#112 NC#2227 ARCI#9397

Date: Mon, 24 Aug 1998 15:03:18 -0400
From: Sam Billingsley <SBillingsley@usaninc.com>
To: "GQRP-list (E-mail)" <qrp-l@blacksheep.org>, "klqrp_submit (E-mail)" <klqrp@waterw.com>, "Qrp1_Submit (E-mail)" <qrp-l@Lehigh.EDU>
Subject: [18300] PIXIE MODs
Message-ID: <21E06269B00ED111BE9B00805F6D0FA33534B7@MAILSERVER1>
MIME-Version: 1.0
Content-Type: text/plain

I continue to try to improve my PIXIE2. The latest change is to put a tuned LC toroid/cap circuit tapped down(about 30%) and connected to output of the LP network with the end of the new LC grounded. A link coupled winding over the cold end of the LC circuit connects the antenna and ground. This acts like a miniature antenna tuner and eliminates the BC feedthrough even using my 125 ended longwire. Before this change the PIXIE was completely swamped with BC interference.

After making a QSO with Lou in Knoxville, TN (I live in Atlanta, GA) on 7.040 (2-way QRP at 5w both about 569) I asked could he listen for me about a 1KHz lower on the PIXIE. Changed gear(same antenna my inverted L longwire at 35 ft) and called. He came back with a 519 and he got a 559. Another PIXIE 2-way QRP QSO.

Right after the call I checked the PIXIE into a dummy load with my scope and calculated 18milliwatt (my battery under load 6.6volts at 60ma..???? not very efficient). The input into the LC added circuit was about 50 milliwatt.

Again I chalk up my personal records with this amazing \$10 rig and I'm still not done yet. Stay tuned!

Sam AE4GX

Date: Mon, 24 Aug 1998 19:09:25 +0000
From: Ed Loranger <we6w@qsl.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [18301] Copying Code.
Message-ID: <35E1BA65.2C17@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Well, its been 6 months that I've been copying code completely in my head. I was listening to a qso last night.

Totally amazing. Instead of hearing spelling mistakes during the qso as "I-N-T-e-a-e-r-e-s-t-e-i-n-g" I hear "inter-er-esting" A stutter.

This guy sent most of his code with a stutter. It is interesting to listen and you hear yourself thinking mentally "Inter-er-er (Come-on guy! You can do it!) esting"

Had a qso after the CQC test with Paul/KF6PYP who couldn't believe I was still sending fine with the Les Logan Bug after 6 hours of contesting. I was definately feeling the groove after 6 hrs. on the bug. As Gene Wilder said in "Stir Crazy" when he was locked in solitary: "I was just starting to get into myself -- One more day, please!"

I hate it when the contest ends.... One more hour, Please!

Yeah, the wrist was all lubed up. I think I was working Paul at 35 wpm before I realized I was still Hyped up! Backed off after he switched to his bug -- it got my attention. :))

Oh, my non-ham project rebuilding 16 horseshoe courts at the City Park is nearly completed! I'm ready to build projects!!

Got a nead "Melt-Solder" keyer and the Tixie in the wings...

Code is cool. Head copy is neat. I hope some of ya new guys find this post motivating enough to toss the pencil. (But not too far -- still gotta work the logbook.)

-Ed

--

72, Ed WE6W (CW only/VP-0); <http://www.qsl.net/we6w> Santa Rosa, CA
QRP-Z#106 QRP-L#1068 AR#112 NC#2227 ARCI#9397

Date: Mon, 24 Aug 1998 14:15:41 -0500
From: "Joe Spencer" <joes@tcjc.cc.tx.us>
To: "qrp-l" <qrp-l@lehigh.edu>
Subject: [18302] 2SD2583 Help
Message-ID: <019101bdcf93\$95a89f00\$8a0c040a@tcjc_ac04.tcjc.cc.tx.us>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Gang,

Can anyone help with info on locating this transistor or a substitute?..
2SD2583

TNX es 73 Joe KK5NA
Joe Spencer
Engineer
Academic Computing
Tarrant County Junior College

Date: Mon, 24 Aug 1998 13:20:00 -0600 (MDT)
From: Paul Harden <pharden@aoc.nrao.edu>
To: Chuck Adams <adams@chuck.dallas.sgi.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [18303] One a prime/other Zombie stuff
Message-ID: <Pine.SOL.3.91.980824130750.10681C-100000@zia>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I always thought ONE **was** a prime number. Well, it will be considered prime for contest purposes.

In my preliminary rules for the ZOMBIE SHUFFLE, I humorously mentioned bonus points for "working Elvis." I've received 3 emails so far from QRP-Lers named Elvis. Being a man of my word ... YES, if your name is truly Elvis, I'll honor 666 bonus points for those working you.

Also received emails from several wanting to wear dresses to kilts for the "YL multiplier." Jury is out on that one yet :-)

The Zombie Shuffle ain't till Halloween, so plenty of time yet to really screw this thing up good -hi.

72, Paul NA5N
Zombie #004
.. which I **know** isn't prime!

Date: Mon, 24 Aug 1998 12:28:25 -0700 (MST)
From: Joe Gervais <vole@primenet.com>
To: qrp-1@Lehigh.EDU
Subject: [18304] BUBBA Summer QRP Sprint this Sunday
Message-ID: <199808241928.MAA21748@usr02.primenet.com>

Howdy Folks,

Q: "How many BUBBAs does it take to screw in a lightbulb?"

A: "Geez, I'm trying to pull in AL7FS here, can you PLEASE
bug me about the honey-do's LATER?!?"

Another reminder for the BUBBA Sprint this Sunday. Time
to let those temp mults make the heat of summer work **for**
you! Remember, there is an Indoor and an Outdoor category.
Note that's "Outdoor", not "Field". I hope to be in the
field, eating grilled salmon with Bob (AB7ST) while racking
up the nice heat mults, but you can just set up in your
backyard if you like. Use the big antenna, stick a thermometer
by your station, ask the spouse to fetch a chilled margarita
for you, and voila! BUBBA-fest! *8-)

BUBBA is more of a party than a contest, though I'm hoping
some of us can rack up big ol' scores. But like any ScQRPion
event, the key is to have FUN. Meet your old friends on the
air, make new ones, radiate, smile. And sweat. :-)

Remember that the SPC (State/Province/Country) multi is
PER BAND. Add up the band totals when you're done. It'll
pay to hop the bands a bit, maybe even prove that 10m is
alive.

I've been bad about announcing BUBBA categories. There'll
be a winner for each:

- 1) Hottest Outdoor Op
- 2) Hottest Indoor Op
- 3) COLDEST Outdoor Op (Gotta give you Northerners a chance. ;-)
- 4) High Score in each category (Indoor/Outdoor, Single/Multi).
- 5) Random drawings from logs.

Prizes will be **guaranteed** to ship before Thanksgiving
(same as FYBO '98.... DOH!), and will be of the same
excellent quality as last year, microwave BBQ pork rinds
and all. :-)

Full rules are appended below. I'll try to get a BUBBA summary sheet to ScQRPion Bob (KI7MN) so he can get it on his website.

Hope to work everyone out there. *This* time I'll bring spare connectors.... :) Thanks for the bandwidth, and may your Monday pass quickly.

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"If it ain't fun, you ain't doin' it right!" -The AZ ScQRPions

BUBBA Summer QRP Sprint (sponsored by the AZ ScQRPions)

Aug 30, 1800Z-2200Z

HF bands, standard QRP calling freqs (no WARC)

CW, QRP (5w or less) only

Categories: Indoor/Outdoor, Single Op/Multi Op.

Exchange RST, SPC, Name, and Temp(F) at OPERATOR'S POSITION.

Score 1 pt per QSO.

Each SPC counts once per band.

Work NQ7RP once per band for 10,000 pt. bonus each QSO.

Multipliers:

SPCs: All bands total

Power: 1-5w = x1, Less than 1w = x2.

Category: Indoor Op = x1, Outdoor Op = x2.

Heat:

- Indoor ops use highest operating temp(F) at OP'S POSITION.
- Outdoor ops use NWS Heat Index (use highest operating Heat Index). See chart below.

Final Score = QSO pts x SPCs x Power x Category x Heat Multi + NQ7RP bonus

EXAMPLE:

5w, 80 QSOs total, 35 SPCs Total (8 SPCs on 10m, 14 SPCs on 15m, 13 SPCs on 20m). Outdoor op, highest operating Heat Index is 107.
NQ7RP worked on two bands.

$80 \times 35 \times 1 \times 2 \times 107 + 20,000 = 619,200$ pts.

Send logs by 9/30/98 to vole@primenet.com or Joe Gervais, POB 1822, Goodyear,

AZ 85338. Include callsign, operator(s), power, location, and highest operating temp (outdoor ops also include relative humidity and NWS Heat Index).

For more info, visit <www.dancris.com/~ki7mn> or email vole@primenet.com.

----- OH-FISH-UL BUBBA HEAT INDEX CHART (for outdoor ops) -----

HEAT INDEX CHART

TEMP(F)	70	75	80	85	90	95	100	105	110	115	120
	--	--	--	--	--	--	---	---	---	---	---
RH 0%:	64	69	73	78	83	87	91	95	99	103	107
10%:	65	70	75	80	85	90	95	100	105	111	116
20%:	66	72	77	82	87	93	99	105	112	120	130
30%:	67	73	78	84	90	96	104	113	123	135	148
40%:	68	74	79	86	93	101	110	123	137	151	
50%:	69	75	81	88	96	107	120	135	150		
60%:	70	76	82	90	100	114	132	149			
70%:	70	77	85	93	106	124	144				
80%:	71	78	86	97	113	136	157				
90%:	71	79	88	102	122	150					
100%:	72	80	91	108	133	166					

Date: Mon, 24 Aug 1998 15:29:03 -0400
From: Ed Tanton <n4xy@att.net>
To: JMcKee@RFMD.com
Cc: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [18305] Re: MF thru HF general coverage receiver
Message-ID: <3.0.5.32.19980824152903.00c52b30@postoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi John, for the described parameters-including price-you could not do better than the RACAL RA-6790. I have one, and many other rcvrs in my collection, and consider it the absolute best non-boatanchor rcvr I own. (Admittedly I'm fonder of several of my BA rcvrs [51S-1, 51J-4, 75A-4, & my HRO-60], but that doesn't make them electrically better, and most of that little group are > \$1000 anyway.)

I have a friend who sells and services them, and they are also available from several sources since the more-or-less demise of HF maritime radio. His name is Allen Bond, WB4GNT, and his surplus & fiberglass company email

address is: <mgs@avana.net>. Prices are right there in your ballpark.

///snip

>What is available in a good MF thru HF general coverage receiver under \$1000?

///snip

>John WB40FT

>jmckee@rfmd.com

>

>

73

Ed Tanton N4XY

EMAIL: n4xy@att.net

189 Pioneer Trail

Marietta, GA 30068-3466

TEL: (770)579-3933 V/MBX/FAX

INTERESTS: QRP

BoatAnchors

Test Equipment

Photography

CW: 99.9%

Mercury Paddle # 0214

QRP to 150W: 95%

~~~~~  
"Think you can, think you can't: either way you're right!"

Henry Ford  
~~~~~

Date: Mon, 24 Aug 1998 12:23:47 -0700 (PDT)

From: KC5TJA <kc5tja@topaz.axisinternet.com>

To: Ed Loranger <we6w@qsl.net>

Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>

Subject: [18306] Re: Copying Code.

Message-ID: <Pine.LNX.3.96.980824120551.30835D-1000000@topaz.axisinternet.com>

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

> Well, its been 6 months that I've been copying code completely

> in my head. I was listening to a qso last night.

>

> This guy sent most of his code with a stutter. It is

> interesting to listen and you hear yourself thinking

> mentally "Inter-er-er (Come-on guy! You can do it!) esting"

What's odd is that I think I heard the same thing. And I wasn't even
consciously listening either. I usually leave the rig on when I go to bed
at night. I didn't think of it then, but now that you mention it, I do
distinctly remember a lot of e, a, and r letters being repeated... :)
Sorry, don't know exact time or frequency. I was in bed... :)

> Code is cool. Head copy is neat. I hope some of ya new
> guys find this post motivating enough to toss the pencil.

I can't do that yet, but that is what I hope to do. I find that writing stuff down just takes way too much time -- even at 5wpm. This is a shame, because when I took the 5wpm code test three years ago, I had written down all five minutes solid. Oh well -- such is life.. :)

Practice makes perfect. As soon as I get my SW-40+ re-aligned to the novice bands, I hope I will be able to participate for real. Right now, it tunes from 7.018MHz to 7.052MHz (this is why nobody could ever hear me!).

```
=====
      KC5TJA/6      |      -| TEAM DOLPHIN |-
      DM13         |      Samuel A. Falvo II
      QRP-L #1447   |      http://www.dolphin.openprojects.net
      Oceanside, CA |.....
```

Date: Mon, 24 Aug 1998 19:42:29 +0000
From: Ed Loranger <we6w@qsl.net>
To: KC5TJA <kc5tja@topaz.axisinternet.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [18307] Re: Copying Code.
Message-ID: <35E1C225.5435@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

If my memory serves correctly, this guy was on
7037 KHz at 0640Z (11:40 PM Pacific time) and both
operators were at about 12 WPM.

Here's a neat page with a link for Head copying.

<http://www.qth.com/ka9fox/op-techniques.shtml>

-Ed

--

72, Ed WE6W (CW only/VP-0); <http://www.qsl.net/we6w> Santa Rosa, CA
QRP-Z#106 QRP-L#1068 AR#112 NC#2227 ARCI#9397

Date: Mon, 24 Aug 1998 13:46:55 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: cqclist@mtechnologies.com, qrp-1@lehigh.edu
Subject: [18308] CQC QSO Party W0CQC Report
Message-ID: <199808241947.NAA06210@edison.chisp.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Seems a lot like Monday here so I can't go into a lot of detail and haven't got the W0CQC log "processed" so you can expect more detail later.

Larry, WJ1R and I multi-opped W0CQC, which is why some of you will have copied Marshall and some Larry in the "name field." Except I had a habit of hitting the wrong button on the keyer and sending the Larry message [g].

As for the multi-op business, don't worry about in the context of the rules-- we were there to hand out 1K point bonuses, not to compete, which was probably a wise point of view since condx seemed pretty tough. And if you worked both of us (on different bands or modes) and need the M or L for a name multiplier-- you've got it.

We ended up with 73 QSO's on all bands, 150-10, with at least one SSB QSO on each band too. We didn't hear ANY contest activity in the novice bands, but did call a couple times just so we could say we did.

I know there aren't that many Novices and Tech Plusses around, but still.

We dropped the novice class from the contest because we went three QSO parties without a single novice entry.

Didn't hear many stations signing portable, but I know of some who were out there.

Please do send in your log (email to
cqccx@mtechnologies.com), even
if you didn't make many contacts. We have changed
procedures
around quite a bit and are moving from not managing to get
certificates
out at all to giving out certificates to just about anybody [g].
Seriously, top score in each state will get one, and that could
be you
with 3 QSOs.

Thanks to everyone who got on, and we'll look for you next
weekend.

73
Marshall Emm
N1FN/VK5FN
n1fn@MorseX.com
Morse Express
"Everything for the Morse Enthusiast"
<http://www.MorseX.com>
(303)752-3382
--

Date: Mon, 24 Aug 1998 13:39:26 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: Steve <smann@advi.net>, qrp-1@Lehigh.EDU
Subject: [18309] Re: 72/73
Message-ID: <199808241947.NAA06247@edison.chisp.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

Hi, Steve, Gang--

>>I was under the impression that some of the numbers were
used in landline telegraph service to speed up messages.
<<

That's unquestionably the origin of "73," but 72 is a fairly recent "adaptation" of 73, specifically among QRPers.

>>For instance, in the newspaper business, articles were often sent in parts over the wire. When the last segment was sent, the number 33 was attached to the end to indicate that it was the end of the story.<<

Don't you mean 30? And like 73 that one goes back to the land-line telegraph codes. Some of us still use it, but I suspect few journalists know where it comes from.

>>it was still being used on the local teletype machine transmissions.<<

I use 30 on magazine articles, and it goes back to my own newspaper days where it was used on typed copy.

73
Marshall Emm
N1FN/VK5FN
n1fn@MorseX.com
Morse Express
"Everything for the Morse Enthusiast"
<http://www.MorseX.com>
(303)752-3382
--

Date: Mon, 24 Aug 1998 15:50:00 -0400
From: Scott Howell <whowell@hq.nasa.gov>
To: qrp-1@lehigh.edu
Subject: [18310] Kc1 question
Message-ID: <3.0.5.32.19980824155000.00803510@mail.hq.nasa.gov>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Ok, ran over the KC1 document on my computer. Man, amazing what one can find when cleaning the drive. Ok, I read some info in the manual that talked about the revision date. So, I believe my version is 1.0. Has there been any upgrade to let's say 2.0 or whatever. If so, what were the changes. If one wished to upgrade, what would have to be done i.e. chip pulled and replaced or desoldered etc, cost, and where it

could be had.

Just wondering.

Also, tried a few features, but didn't notice much change so may be very subtle or I just don't have any sense.<grin>.

tried wait, mute, and qsk, but didn't or couldn't tell any change. Using this in a Sierra. Of course it doesn't matter cause the rig is so incredible and the KC1 just rounds it out. Man, what a rig. I got my kenwood back today, but could care less if I ever get it on the air.
tnx es 73 de n3byy

Date: Mon, 24 Aug 1998 13:11:03 -0700

From: "Michael A. Gipe" <mgipe@reliablemeters.com>

To: <we6w@qsl.net>, "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>

Subject: [18311] Re: Homebrew Expedient Antenna Insulators -- Help!

Message-ID: <130301bdcf9b\$52117c00\$140a0a0a@double_trouble.reliablemeters.com>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Ed --

>I once found a website that had wonderful photos of home
>made antenna insulators for wire antennas.....

I've been experimenting with small simple wire antennas for field use, particularly on twenty meters. The antenna which I have in my NC20 "GO-bag" is a dipole made with some flexible copperweld from the Wireman, surveyor's nylon cord, and homemade insulators. It works well, requires no tuner, and goes up easily. The most important part of the design spec is that it tolerate being hoisted and lowered hundreds of times in its life.

The center insulator is made from a small PVC endcap, with a BNC connector built in.

The end insulators are made from 1/2" Delrin rod which I purchased from the local Tap Plastic store, cheap. I didn't know they had anything like that until I asked one of the clerks if he knew where I could get some Teflon rod, and he said that they carried Delrin rod, which is part Teflon, and for my purposes, much better. The stuff is very easy to work. I came up with two different kinds of end insulators. The first just has two holes drilled through, one on each end of a 2" section of the rod. This works fabulously. It is light weight, slides through tree branches, strong, resistant to wear from

the wire, and soft enough to work easily. The second version has the holes at each end also, but at one end I cut a slot at an angle out to meet the hole. The idea is to be able to slip a loop of nylon cord into the slot where tension keeps it in the hole.

The motivation for insulator type 2 is that you can't always dictate the way you are going to get the support cord into the air. It is convenient to be able to disconnect the nylon cord from the antenna. First I tried fishing tackle snaps, but they proved to be both insufficiently strong in usable sizes to be pulled through the tree branches, and they tended to pop open when pulled through the trees.

Don't have a lot of field experience with version 2 yet, but I'll let you know.

Mike K1MG

PS: You ask, "What's a Go-bag?" Ocean sailors know that it is the bag hanging near the cockpit hatch which contains everything you need to survive in the life raft. You can grab it on the way up when you step into the raft as the boat sinks beneath you.

Date: Mon, 24 Aug 1998 13:32:11 -0700
From: W7LS <w7ls@blarg.net>
To: qrp-1@Lehigh.EDU
Subject: [18312] Dentron qrp 75m ssb/cw \$100(needs work)
Message-ID: <35E1CDCB.3586@blarg.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi. I have a Dentron 75 meter ssb transceiver that I can part with. It needs some work in the mixer. It does not receive or transmit, but I did get it to work for a time, and then it quit, again. It has a digital readout, by the way. I don't have a mic for it, but any mic will work, more or less. It has a built-in speaker, too.

The problem is in the dual gate mixer. I have a few new ones to toss in with it. The mixer gets hot and dies after a few minutes. Probably a short that is putting a forward bias on it or something. I don't have time to get into it, now.

The rig is rated at something like 5 or 10 watts output. It's small. It's smaller than a HW-8. Built pretty rugged, too. Covers all of

75 and 80, as I recall. It has a cw mode, as well.

Again, this rig needs some work. I do have a manual copy for it, with the schematics and a couple of people's names that are very adept at these rigs and are rumored to be very helpful.

73 de Jim W7LS 425-788-0779

Date: Mon, 24 Aug 1998 16:32:19 -0400
From: Stewart Whitehouse <STEW_W@compuserve.com>
To: Low Power Amateur Radio <QRP-L@Lehigh.EDU>
Subject: [18313] Zombie warning!
Message-ID: <199808241632_MC2-573B-6A81@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain; charset=ISO-8859-1
Content-Disposition: inline

Hi Folks

Just saw an ad on the Speed Vision Channel for this weeks Lost Drive-in movie. (Saturday night I think). The flick is titled:

"CHOPPER CHICKS IN ZOMBIETOWN"

Ought to be a real winner.

Sorry all, I Just had to chuckle out loud.

Stew KE4YH

Zombie #186

Date: Mon, 24 Aug 1998 16:39:24 EDT
From: kq0i@juno.com (Mark R Milburn)
To: qrp-l@Lehigh.EDU
Subject: [18314] ARCI Award
Message-ID: <19980824.203733.7271.0.KQ0I@juno.com>

Thanks to the ARCI group! Today's mail brought a nice certificate for the 1997 Fall QSO Party, and it's beautiful. It's not very hard to win first place, Iowa, when there might be only one entrant, but the award is a nice gesture and I'll enjoy having it. Look out next year...we've got a growing QRP group in Iowa now, and next year will be much tougher.

thanks again to all who make these events possible.

72/73, Mark KQOI
Des Moines, Iowa

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Date: Mon, 24 Aug 1998 16:42:14 -0400
From: Jeff Logullo <jeff.logullo@Central.Sun.COM>
To: qrp-l@Lehigh.EDU
Cc: Arjen.Raateland@vyh.fi
Subject: [18315] Re: QRP-L digest 1192
Message-ID: <35E1D026.F58D83B7@central.sun.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

> Conclusion: some tubing apparently shrinks in steam, but not all types
> do. A hair dryer (1250W) won't do with the tubing I got, either. A real
> hot air gun is a rather expensive for the odd shrinking job, but an
> electric kitchen stove will work. One should, however, get the right
> size tubing, hi.

Hobby shops that sell model airplanes sell heat guns used for shrinking
polyester covering film for airplane wings. Cost: about \$15. And how
does it work on shrink tubing? Marvelously.

Date: Mon, 24 Aug 1998 14:51:52 -0600 (CST)
From: "Brian.Buydens@usask.ca" <buydens@duke.usask.ca>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [18316] Re: Is 1 a prime number?
Message-ID: <Pine.OSF.4.02A.9808241449580.10002-100000@duke.usask.ca>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Mon, 24 Aug 1998, Jay Sullivan wrote:

> I always understood that by definition 1 was *not* a prime number.

I remember a prime number is divisible by only TWO numbers, one and itself. 1 is only divisible by one number therefore it is not prime.

Brian

```
+-----+
| Brian Buydens,          Computing Services, University of Saskatchewan |
| email: Brian.Buydens@usask.ca      http://duke.usask.ca/~buydens |
| VE5RDV                                |
+-----+
| DO NOT ADD ME TO ANY MAILING                                No keyboard present |
| LISTS WITHOUT MY CONSENT !!!                                Hit F1 to continue |
|                                                                Zen engineering? |
+-----+
```

Date: Mon, 24 Aug 1998 17:10:37 EDT
From: Conway Yee <cyee@bidmc.harvard.edu>
To: <qrp-1@lehigh.edu>
Subject: [18317] Re: Is 1 a prime number?
Message-ID: <08241998171037.3N110T@email.bidmc.harvard.edu>

Text of message from buydens@duke.usask.ca, 24 Aug 1998, 04:51 PM

>On Mon, 24 Aug 1998, Jay Sullivan wrote:

>

>> I always understood that by definition 1 was *not* a prime number.

>

>I remember a prime number is divisible by only TWO numbers, one and
>itself. 1 is only divisible by one number therefore it is not prime.

- 1) 1 passes through the Sieve of Erasthones (?sp?)
- 2) Is the tested number, 1, divisible by itself? Yes.
- 3) Is the tested number, 1, divisible by 1? Yes.
- 4) Are there any other integers that can evenly divide into the tested
number, 1? No.

Therefore the tested number, 1, is prime.

QED.

Can we get back to the topic of conversation?

Ob-QRP:

Before the K2 came out, I started on the Hands multi-band rig. While I haven't gotten very far (work got in the way), I was thinking about building a LDG autotuner into the case. Anybody try something similar?

tnx es 73 de Conway Yee, N2JWQ

Date: Mon, 24 Aug 1998 14:15:04 +0000
From: Roger Hightower <n7kt@earthlink.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [18318] Prime numbers
Message-ID: <35E17568.F7602412@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Try this URL for more than you wanted to know about Prime Numbers:

<http://forum.swarthmore.edu/dr.math/problems/principe1.28.97.html>

In spite of that, I'd still look at "1" as a prime.

--

72/73, de Roger, N7KT - QRP-L #62 - Mesa, AZ

Date: Mon, 24 Aug 1998 12:50:44 -0700
From: gsurrency@juno.com (Gary L Surrency)
To: qrp-l@lehigh.edu
Subject: [18319] Re: CQC QSO Party Multi-op: AB7TT and Murphy
Message-ID: <19980824.141544.10798.0.gsurrency@juno.com>

Joe, AB7TT wrote:

>WHERE'S
>THE BNC-To-PL259 ADAPTER?!? NOOOOOOOO! JAN'S GONNA
>HATE ME!

That's why I'm building my ZM-2 with BNC jacks for the coax fittings, instead of the SO-239 UHF connectors furnished. For the ARK30 and OHR100, I have a couple of short cable assemblies with a PL-259 on one end, and a BNC plug on the other. Everything else has BNC jacks for the antenna connector.

Sorry you missed the 'test, conditions were pretty poor, but I managed to get almost two full pages of contacts anyway. Still have to tally the results.

72,

Gary Surrency AB7MY QRP-L #571 Chandler, AZ (near Phoenix)

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Date: Mon, 24 Aug 1998 16:40:11 -0500
From: "Karl Heimbach" <heimbach@concentric.net>
To: <JMcKee@RFMD.com>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [18320] Re: MF thru HF general coverage receiver
Message-ID: <005101bdcfa7\$c792d9e0\$620505ac@pentium>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

John,

Take a look at the Ten-Tec RX-320 DSP receiver. I've had mine since last Thursday and am delighted with it. Introductory price is \$279 plus shipping. It's a triple conversion, computer controlled, black box. The filtering is selectable from 8.0, 5.0, 2.5, and 1.8 kHz and 500 Hz. It has a software spectral display in addition to the radio faceplate. If you're interested, I can email you a couple of jpeg files further illustrating it's capabilities.

It does nearly as well as my Omni VI Plus in carving out CW signals.

Karl - W5QJ
-----Original Message-----
From: John McKee <JMcKee@RFMD.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Date: Monday, August 24, 1998 7:48 AM
Subject: MF thru HF general coverage receiver

>Hi Gang,

>

>What is available in a good MF thru HF general coverage receiver under
>\$1000?
>I'm interested in AM, SSB, and CW through 30MHz with good filtering,
>either built in
>or available as an option. Also would like to use it with my home brew
>qrp transmitters.
>
>Thanks es 72,
>
>John WB40FT
>jmckee@rfmd.com
>
>

Date: Mon, 24 Aug 1998 17:38:42 -0400
From: Steve <smann@advi.net>
To: mgemm@mtechnologies.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [18321] Re: 72/73
Message-ID: <35E1DD62.6A86@advi.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Marshall Emm wrote:

> Don't you mean 30? And like 73 that one goes back to the
> land-line telegraph codes. Some of us still use it, but I
> suspect few journalists know where it comes from.

Yep, I think yer rite! I get foggy up here in the foothills of the
Appalachians!

Steve N4EY
Toast, NC

Date: Mon, 24 Aug 1998 14:48:42 -0700
From: "Roy Lincoln" <wa4dou@mailexcite.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>, we6w@qsl.net
Subject: [18322] Re: Homebrew Expedient Antenna Insulators -- Help!

Message-ID: <BBIBFOKPDMMNGCAAAA@mailexcite.com>

Mime-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Theres nothing critical about antenna insulators, especially if used under 100 watts. I use pvc pipe around 1-2 to 3-4 " in dia. Costs like 2 bucks for 10 feet or something like that. Makes 20 or more. Also good for spreaders for openwire line.

Use your ingenuity . Have fun! 73 Roy WA4DOU

--

On Mon, 24 Aug 1998 18:58:24 Ed Loranger wrote:

>Gangue, I tried to spare the list but dilligent searching
>of my archives/links has been without success.

>

>I once found a website that had wonderful photos of home
>made antenna insulators for wire antennas. There were
>two type -- Center and End insulators made form rectangular
>plastic. Slots in the plastic provided efficient connection
>of the antenna wire without running or tying the wire through
>holes.

>

>The site had views of a sloping antenna in the backyard. This
>much I remember.

>

>Does anyone have the website reference for me???

>

>Please. I've just inherited a box with about 15 pounds of
>scrap plastic display covers!

>

>TIA Ed WE6W "72"

>--

>72, Ed WE6W (CW only/VP-0); <http://www.qsl.net/we6w> Santa Rosa, CA

>QRP-Z#106 QRP-L#1068 AR#112 NC#2227 ARCI#9397

>

>

Free web-based email, Forever, From anywhere!

<http://www.mailexcite.com>

Date: Mon, 24 Aug 1998 17:59:41 -0400

From: "Beaks" <beaks@westco.net>

To: <ehare@arrl.org>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: [18323] Re: West Virginia 2XQRP
Message-ID: <002c01bdcfaa\$7fceeef60\$a44ef5cd@beaks>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Ed, will look for you at the hamfest, I'll be there on Saturday. I am really getting disappointed in this one though, it gets smaller and smaller each year with less vendors and "junk" to browse through. Seems last year was about all computer stuff, only stayed a couple hours. The one in Wheeling in Sept. is much better in my book.

Arch N8EAG

-----Original Message-----

From: Ed Hare, W1RFI <ehare@arrl.org>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Date: Monday, August 24, 1998 1:17 PM
Subject: West Virginia 2XQRP

>Hello, Gang,

>

>This weekend I am attending the ARRL West Virginia convention, and will
>be driving there, so I am bringing my /M /QRP setup. I will have time
>for only limited operating, but to maximize the chances of working the
>West Coast, I will be operating around 2200-2400 Z on Friday and
>Saturday evenings (8/28 and 8/29). I will try both 14.060+- and
>7.040+-. With limited time, I probably won't do much ragchewing.

>

>If you need the state, email me and I will do my very best to make sure
>we QSO.

>

>72, Ed Hare, W1RFI

>

>

>

Date: Mon, 24 Aug 1998 22:05:57 +0000
From: Ed Loranger <we6w@qsl.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Cc: 70511.3041@compuserve.com
Subject: [18324] Re: Homebrew Expedient Antenna Insulators -- Help!
Message-ID: <35E1E3C5.6B7C@qsl.net>
Mime-Version: 1.0

Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gangue, Charlie wrote this article!

>Ed-

>You may be thinking of my article on the "FFD" in the June issue of the
>Sojourner, online with pictures (courtesy of nu6SN) and drawings at
>www.natworld.com/ars, in the Sojourner archives.

I just perused the ARS Sojourner and found the June 1998 issue link
doesn't work. But never fear, 'Vee Haf Vays of Fixing dis!'

I did the manual typing bit and dug down into the site. Here's
the main article location for those wishing to view it on-line:
http://www.natworld.com/ars/pages/back_issues/0698_text/ffd.html

The Center insulator design is at:

http://www.natworld.com/ars/images/backissue_images/0698_images/ffd6.gif
And Photo:

http://www.natworld.com/ars/images/backissue_images/0698_images/ffd3.jpg

End Insulators:

http://www.natworld.com/ars/images/backissue_images/0698_images/ffd7.gif
And Photo:

http://www.natworld.com/ars/images/backissue_images/0698_images/ffd2.jpg

Heck, check out the open-wire line construction at:

http://www.natworld.com/ars/images/backissue_images/0698_images/ffd4.jpg
(Same technique as the Center Insulator Design above.)

Easy as eating pie!

Thanks to Charlie Lofgren and ARS for a great article on building
the G5RV and other "Field Friendly Doublets" in the FFD article.

Charlie call is: w6jjz

-Ed "Wahoo!"

--

72, Ed WE6W (CW only/VP-0); <http://www.qsl.net/we6w> Santa Rosa, CA
QRP-Z#106 QRP-L#1068 AR#112 NC#2227 ARCI#9397

End of QRP-L Digest 1193

